

Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn
 420 425 430
 Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn Gly Leu Ile Pro
 435 440 445
 Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu
 450 455 460
 Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu
 465 470 475 480
 Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp
 485 490 495
 Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu
 500 505 510
 Asn Gly Gln Pro Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys
 515 520 525
 Lys His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly
 530 535 540
 Ala Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro Pro Arg Lys Ser
 545 550 555 560
 Arg Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu Asn Glu Glu Tyr
 565 570 575
 His Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln
 580 585 590
 Asn Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln
 595 600 605
 Ile Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys
 610 615 620
 Lys Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile
 625 630 635 640
 Ala Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu
 645 650 655

<210> 380

<211> 671

<212> PRT

<213> Homo sapien

<400> 380

Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
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 Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
 35 40 45
 His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
 50 55 60
 Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
 65 70 75 80
 Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
 85 90 95
 Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
 100 105 110
 Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
 115 120 125
 Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
 130 135 140
 Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
 145 150 155 160
 Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala

165 170 175
 Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
 180 185 190
 Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
 195 200 205
 Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
 210 215 220
 Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
 225 230 235 240
 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
 245 250 255
 Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
 260 265 270
 Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
 275 280 285
 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
 290 295 300
 Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
 305 310 315 320
 Val Ser Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
 325 330 335
 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
 340 345 350
 Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
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 Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu
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 385 390 395 400
 Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Val Glu
 405 410 415
 Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn
 420 425 430
 Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn Gly Leu Ile Pro
 435 440 445
 Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu
 450 455 460
 Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu
 465 470 475 480
 Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp
 485 490 495
 Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu
 500 505 510
 Asn Gly Gln Pro Glu Lys Arg Ser Gln Glu Pro Glu Ile Asn Lys Asp
 515 520 525
 Gly Asp Arg Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys Lys
 530 535 540
 His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly Ala
 545 550 555 560
 Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro Pro Arg Lys Ser Arg
 565 570 575
 Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu Asn Glu Glu Tyr His
 580 585 590
 Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln Asn
 595 600 605
 Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln Ile
 610 615 620
 Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys Lys

625	630	635	640
Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile Ala			
	645	650	655
Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu			
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<210> 381
<211> 251
<212> DNA
<213> Homo sapien

<400> 381	
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ccaatatccc aggaagaagca ttggggaggt gggggcaggt gaaggaccca ggaatcacac	180
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caagcagctca g	251

<210> 382
<211> 3279
<212> DNA
<213> Homo sapiens

<400> 382	
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cactctggagg ggacatctct cagaaggtag gagtgaacaa acaccgcgtg caggggagagg	180
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gactgcaggg agggaggggg gcagggttgt gggggggagt acgatgagga tgacctgggg	540
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ataattgttt	tttgtctctt	tttttccaac	attctgttga	ggaggggata	ccacctgttc	2820
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cccagctgat	agagagagat	gcacaggtgg	agctcttccc	agtgggttat	ggagcattgc	3180
ggcagagatt	ctgtgacact	ctgtgttaca	attctggcgg	agcaaataaa	actgaaactt	3240
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<210> 383

211 154

«212» PRT

<213> Homo sapiens

<400> 383

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Gly Lys Arg Gly Pro Leu Leu Gln Gly Leu Thr Trp Ala Thr Gly Gly

His Cys Phe Ser Ser Glu Glu Ser Gly Ala Val Asp Gly Ala Gly Glu
35 40 45

Lys Lys Asp Arg Ala Trp Leu Arg Cys Pro Glu Ala Val Ala Gly Phe
50 55 60

Pro Leu Gly Ser Asp Cys Arg Glu Gly Gly Arg Gln Gly Cys Gly Gly
65 70 75 80

Ser Asp Asp Glu Asp Asp Leu Gly Val Ala Pro Gly Leu Ala Pro Ala
85 90 95

Trp Ala Leu Thr Gln Pro Phe Ser Gln Ser Pro Gly Pro Gln Ser Leu
100 105 110

Pro	Ser	Thr	Pro	Ser	Ser	Ile	Trp	Pro	Gln	Trp	Val	Ile	Leu	Ile	Thr
118							120					122			

Glu Leu Thr Ile Pro Ser Pro Ala His Gly Pro Pro Trp Leu Pro Asn
130 135 140

Ala Leu Glu Arg Gly His Leu Val Arg Glu
145 150

<210> 384
 <211> 697
 <212> DNA
 <213> Homo sapiens

<400> 384
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 ggggaagggtt cctcttttga ttgccaagtg ccataacctt gagcctactt ctaccatggt 180
 tctgctctct ggccaagcag gctgggttgc aagaatgaaa tgaatgattc taagctatgg 240
 acttaacctt gaaatggaaa gtcttgcaat cccatttga ggtaccgtct gtgcacatgc 300
 ctctgtagag agcagcatto ccagggagctt tggaaacagt tggcaactgt aggtgcttgc 360
 tcccagaac acatcctaaa aggtgttgtt atgggtgaaa cgtcttccct ctttattggc 420
 cctctctatt tatgtgaaca actgtttgtc tttttttgta tcttttttaa actgtaaagt 480
 tcaatttga aeatgaatat catgcaata aattatgcga ttttttttc aagataaaaa 540
 aaaaaaaaa aaaaaa 557

<210> 385
 <211> 337
 <212> DNA
 <213> Homo sapiens

<400> 385
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 gtctctctag cagcagatgg gttaggagga agtgacccaa gtggttgact cctatgtgca 120
 tctcaaggtt atctgtcttc ttgcagtagt gacacatcat caactctgca ttgttgatca 180
 aaagctgggt gtgcttttcc tcaagtaaga agcctcttag aaaaagctga atagacttag 240
 tatcagacag gtccagtttc cgcaccaaca cctgctggtt cctgtctgtg gtctggatct 300
 ctttggccac caattccccc ttttccaat ccggga 337

<210> 386
 <211> 300
 <212> DNA
 <213> Homo sapiens

<400> 386
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 gccgccttgg ccagagaggt gggcgcgggt ctgctcttcc aggttggcgg ctgttaactca 120
 ggcaccttgg ccgaaggtt ctgcaaggga cccaccgacc ccagccgggg cggcggcggc 180
 ggggaacttg ccggtgtgtt gggcggagc ggactgctgt tccgcggagc ggcagcgaag 240
 atgttagctt tgcgtccagc gaacgtggaa cgtcccgagg gctgtggcgt aacctcagcc 300

<210> 387
 <211> 537
 <212> DNA
 <213> Homo sapiens

<400> 387
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 cccctctctg tgcctcatgt atcagcaact atgagttcgg caaaagcttc ttccagagggc 120
 tgaaccagga ccgcttctgt ggcggctgaa aggggcaagg aggcgaaggac cccgtctctc 180
 ccacggatgg ggagaggcca ggaggagacc cagccaaagt ccttttctc agcatcgagg 240
 gaggggcttt gtcttccctc cctcccggtt acaagctcca gggcagggtt gtccctctgg 300
 gggcggcagg acttctctag acacaacttc tctctgtctg tccagctgtg gggatctaca 360
 cttaaccacc ccccaggctt aagaccaaat ctccagctg cccccctggt ttgtccctgt 420
 gtgtgctgta gctgggcatg tctccaggaa ccaagaagcc ctccagctgt tgtagtctcc 480
 ctgaaccttg ttaattcctt aagctcaaa atgatgaact tcaaaaaaaa aaaaaa 537

<210> 388

<211> 520

<212> DNA

<213> Homo sapiens

<400> 388

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aggataattt ttaaaccaat caaatgaaaa aaacaaacaa acaaaaaagg aaatgtcatg 60
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gtttgaagat tgcctcttct acagcttctg agaattgtgt tatttcactt gccaaagtga 180
ggacccccct cccaacattgc cccagccccc ccttaagcat ggtcccttgt caccaggcaa 240
ccaggaaact gctactttgt gacctcacca gagaccagga ggggtttggt agctcacagg 300
acttccccca cccacagaaga ttagcctccc atactagact cactactaac tcaactaggc 360
tcatactcaa ttgatgggta ttagacaatt caatttcttt ctgggttatta taaacagaaa 420
atcttctctc ttctaattac cagtaaaagg tcttggtatc ttctctgttg aatgattctc 480
atgaacttgt cttattttta tgggtgggttt tttttctggt 520

```

<210> 389

<211> 365

<212> DNA

<213> Homo sapiens

<400> 389

```

cgttgcccca gtttgacaga aggaaggcgc gagcttattc aaagtctaga gggagtgagg 60
gagtttaagc tggatttcag abctgcctgg ttccagccgc agtggtccct ctgctccccc 120
aacgacttcc caaatatctc caccagcgc ttccagctca ggcgtctctg aagcgtcttg 180
aagcctatgg ccagctgtct ttgtgttccc tctcaaccgc ctgtctctac agctgagact 240
ccaggaaac ottcagacta ctttctctct cottoagcaa ggggcgttgc cccactcttc 300
tgagggtcag tgaagaaccc tagactccca ttgtataggg tagaaagggg aagggtgctg 360
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<210> 390

<211> 221

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(221)

<223> n = A,T,C or G

<400> 390

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tgccctccca tcttggcccc gacttctctg tcaggaaagt gggatgggac cccattctga 60
tacacggntt ctactgggtg tgaacatct ctgcttgcgg ttccaggaag gctcttggct 120
gctctangag tctgancnga ttcgttgccc caanttgaca naaggaaagg cggagcttat 180
ccaaagtcta gaggagctgg aggaagtaag gctggatttc a 221

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<210> 391

<211> 325

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(325)

<223> n = A,T,C or G

<400> 391

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ctctccggccc cagccctggag ctgctcctgg cctctaccac caatcagncg aggcgagcag 120
tagccaggggc actgctggcca acagccagtc cnnatccat catgtnaccc ggtgngctct 180
naantngat atccanagcc ctaccacatn tagttctgct ctccacccgg ctaccagccc 240
cactgccag gaactctaca gccagtaccc tgtcccgagc tctctaccta ccagtaagat 300
gagacctccg gctactacta tgacc

```

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<210> 392
<211> 277
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(277)
<223> n = A,T,C or G

```

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<400> 392
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agctccactt nggcacnagn cctctacttg agtctctccc cgggcctggn ccagtgagaa 120
antaaccaga accgcacatgn cctaaanaen nccrggcttn tggggttntc aatgactgaa 180
tgccgtgcac caccctgtcc actacgtgat gctgtaggat caaagctcca cagtgggggg 240
ctgaggatac aggcgcgcgt cctgtgttgc tggggaaa

```

```

<210> 393
<211> 566
<212> DNA
<213> Homo sapiens

```

```

<400> 393
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ttgcggggaa cactgtcagag acaatgcctg gactttccaa ccttagccca tctgtgggca 180
gagaaggctc agtttgtcca ttagcattat catgatata ggaactggta ctgtgttaag 240
gaggggtctc ggnagatctg cccctttaga gacaccttcc ttataatgaa gtatttggga 300
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catttattaa tcatcctctc ctgtgtctat tatttatctc atatctctac gctggaaact 420
tctgtcctca atgtttactg tgccttttgt ttgtctagtt tgtgttgtty aaaaaaaaaa 480
cattctctgc ctgagtttta atttttgtcc aaggttattt taactctatc aattaaagc 540
ttttgcttat caaaaaaaa aaaaaa

```

```

<210> 394
<211> 384
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(384)
<223> n = A,T,C or G

```

```

<400> 394
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gcaggaggac cgggctttaa ggaattttta gctgaggttc aertgagacc ccaaacacca 180
tcccagagat atcggggaga agggggcagt aattacccaa atccgggttg agactgaagt 240
gaacatccag tctctgata aggaacattg gaaccagccc caggacccaa ttaccatcac 300
agggtacgaa aagaacccag aagctgccag ggaatgtata ctgagaattg tgggtgaact 360

```

```

tgagcagatg gttcttgagg acgt
384

<210> 395
<211> 399
<212> DNA
<213> Homo sapiens

<400> 395
ggcaaaactg tgtgacctca ataagacctc gaagatccaa ggtcaagtat cagaagtgaac 60
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tatcagaggt ttcatcattg cygaaattgt ggagctctaa gaaatcatgg cctctgaagt 180
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399

<210> 396
<211> 403
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(403)
<223> n = A,T,C or G

<400> 396
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sgacacggac aactctgttc ttcatcaact tctagagaaa aaaggagatt gtttagtagt 180
actaaaaaaa gttgatgaat aatctggata ttttctcaa aaagattcct tgaacacat 240
taggaaaatt gagggcctta tgatcagaat gctagaatta gtcatttggt ctgaagcagg 300
gtttcgggga gggagtgagg gataaaagaa ggaaaaaag aagagtgaga aaacctactt 360
atcaaggcag gtgcctatcc tcaatgttag gccctgtct ttt
403

<210> 397
<211> 400
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(400)
<223> n = A,T,C or G

<400> 397
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tcctatccgc ctctgtgttg gtaacagaat gactgacaaa
100

<210> 398
<211> 278
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(278)
<223> n = A,T,C or G

```



```

<400> 398
gcggcgcgcgt cgacagcagt tccgccagcg ctgcgccctg ggtggggatg tgcctgcacgc 60
ccacctggac atctgggaagt cagcggcctg gatgaaagag cggacttccac ctgggggggat 120
tcactactgt cctctcgacca gtgaggagag ctggaccgac agcagggtagg actcatcctg 180
ctccggggcag cccatccacc tgtggcagtt cctcaaggag ttgctactca agccccacag 240
ctatggcgcg ttcattangt ggctcaacaa ggagaagg 278

```

```

<210> 399
<211> 298
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(298)
<223> n = A,T,C or G

```

```

<400> 399
acggaggggg aggaagcgnc cctgggacg anaggatggg tectgncatt gaacccctcn 60
gggggtgcgc catggagngc atggggcgcg gctcgggcca cggcatggat cgcctgggct 120
ccgagatcga gcgcctgggc ctggctcctg accgcctggg ctccgtggag cgcctgggct 180
cgggccttga gcgcctgggc ccgctggggc tcgaccacat ggctccacac attganecga 240
tgggccagac catggagcgc attggtctct gctgggagcn catgggtgcc ggcctggg 298

```

```

<210> 400
<211> 548
<212> DNA
<213> Homo sapiens

```

```

<400> 400
acatcaacta cttcctcatt ttaaggctat gcaqhtccct taatcccttt ttccctcctt 60
gtactatgtac atgtatgaaa ttctctcttc ctaccgaact ctctccacac atcccaaggt 120
caaaagacaa cagccttaga agggtaagag ggcacctat gaaatgaact ggtgattctt 180
tgagctctct ttctccacgt ttaaggggcc atggcaggac tttagagttg gacttaagac 240
tgccagcgcc tagagaatta ttctctacag gctttgaggc caccatgtc acttatcccg 300
tatccctctt caccatccct ttgtctatkc tgaatgcctc aagatgcaac tggggcagcta 360
gttggcccca taattctggg ccttctgtgt ttgttttaat taacttgggc tccacaggaag 420
ctttccagtg atctctctacc atggggccccc ctctgtggat caagcccttc ccagcccttg 480
tcccagccc ctcctgcccc agcccccccg attgctctgg tgcctagccc tccatttggg 548
agaaggtt

```

```

<210> 401
<211> 355
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(355)
<223> n = A,T,C or G

```

```

<400> 401
atgttttcca tggttatgtt ctadacattg ctacctcaag gctcctggaa acttgaattt 60
tgatgtctcc aagtagtcca ccttcattta aeterctgaa actgtatcac ctttgcgaag 120
taagagtggt ggctatttc agctgctctt acaaatgac tggctcctga cttacgcctc 180
tatcaatgaa tgtgtctgaag caaagtgccc atggtggcgg cgaagaagan aaagatgtct 240
ttgtttttgg actctctgtg gtcccttcca atgctggagg ttccaacca gggggaagggt 300

```

cccttttgcg tggccaagtg ccataaccat gagcactact ctaccatggn tctgc 355

<210> 402
 <211> 407
 <212> DNA
 <213> Homo sapiens
 <220>
 <221> misc_feature
 <222> (1)...(407)
 <223> n = A,T,C or G

<400> 402
 atggggcaag ctggataaag aaccaagacc cactggagta tgggtgtctt aagaacacca 60
 tctcacatgc ggtggcctac ataggctcaa aataaaggaa tggagaaaaa tatttcaagc 120
 aaatggaaaa acagaaaaag caggtgttgc actcctactt tctgacaaaa cagactatgc 180
 gaataaagat aaaaagagag aggaacttac aaaggtgggt ctgacctttg aataattctca 240
 ttggttgata ccaactctgg ctgttttaat tgcacaaaac aaaggatata ttgtctgagg 300
 ttgtggagct tctccccgc aagaactccc tgatctccca aaatttggtt gagatgttag 360
 gntgattttg ctgacaaact cttttctgaa gttttactca tttccaa 407

<210> 403
 <211> 303
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(303)
 <223> n = A,T,C or G

<400> 403
 cagtatctat agccaaactg aaaagctagt agcaggcaag tctcaaatcc aggcacacaa 60
 tuctaaagca gagccatggc atggtgaaaa tgcacaaagg gagtctgggc aactctacaa 120
 tagagacaaa gaactactca gtcatgaaca aaaggcaga caccacactg gatctctatg 180
 gggattggat attgtaatta tagagcagga agatgacagt gatcgctatt tggcacaaca 240
 tcttaacaa gaacgaagcc cattatttac ataacctccc attcggtaac catgttgaaa 300
 gga 303

<210> 404
 <211> 225
 <212> DNA
 <213> Homo sapiens

<400> 404
 aagtgtaact tttaaaaa ttgtggattt tgaanaattct tagaggaaag taagggaaaa 60
 attgttaatt cactcaattt cctttacatg gtgaagggtc tcttttgatc ctacaaaag 120
 aacttttcca ctggtgttct catagtgttt aagtgtaaca gatgtgttgg gcatgtgaat 180
 cctcaagtgct ctgtgtaata aataaagtat ctttatttca ttcct 225

<210> 405
 <211> 334
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(334)

<223> n = A,T,C or G

```

<400> 405
gagctgttat actgtgagtt ctactaggaa atcatcaaat ctgagggttg tctggaggac 60
ttcaatacac ctccccccat agtgaatcag ctccaggagg gtccagtccc tctcttaact 120
tcatacccaa cccatggccaa aggaagaacc tccctccttg gtccacagcc tctcttaggc 180
ttccagtgcc ctgaggaca gagtgggtta tgttttcagc tccatccttg ctgtgaggtg 240
ctgttgaggc tgtggtccca gcttcgtgta agtggctcat ggadagtgcc cagcccatgt 300
cactctccac tctctcaann tggatcccaac ccat
334

```

<210> 406

<211> 216

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(216)

<223> n = A,T,C or G

```

<400> 406
tttcaacct aatgaggagg ttganatnac atmaaccag gaattgcats gttctcaang 60
gaacaacaaca cccaataaacc tctggagtgc agactgacaa ctgtgagaca tgcacttgct 120
acnaaacaca aatttnatgr tgcaccttg tttctcaanc tytggtgtat gacaaagaca 180
actgccaang aetnttcaag aaggaggact gccaat
216

```

<210> 407

<211> 413

<212> DNA

<213> Homo sapiens

```

<400> 407
gttgacttgc tagtatcals tgcattcatt gaagcacaag aacttcattg ctgactcat 60
gtaaatgcac taggatrraa aaataaatlt gatataccat ggaacaagac aaaaaatatt 120
gtacaacatt gcaccocagtg tcagatttcta caactggcca ctgaggagc aagagttaat 180
ccacagaggtc tatgtctctaa tgtgttatgg caaatggatg tcatgcagtg accttcattt 240
ggaaaaattgt catttgtcca tgtgacagtt gatacttatt cacatttcat atgggcaacc 300
tgccagacag gagaaagtct tcccatgtta aaagacattt attatcttgt ttccctgcca 360
tggtgagttcc agaaaagtt aaaaacagaca atgggcagag ttctgtagta aag 413

```

<210> 408

<211> 183

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(183)

<223> n = A,T,C or G

```

<400> 408
ggagctngcc ctcaattcct coatttctat gttaacatat tcaatgtctt ttgnatttaa 60
ttcttaacta gtttaactct aaagggctaa ntaactccta actagtcctt caattgtgag 120
cattatactt ccagktatcc ccttctnttt tatttaactec ttcttggcta cccatgtact 180
nrl
183

```

<210> 409

<211> 250

```

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(250)
<223> n = A,T,C or G

<400> 409
ccccagcatg ataagctctt tattctctga agtctctgta ggaatcatc aaatctgacg 60
gtgggttggg ggacctgaac aaacctcctg taattaatca gctttcagtt tctccccccta 120
gtccctctct caacaacata ggaggatcct ccccttcttc ctgctcaccg ccttatctag 180
gcttcaccag cccccaggga cagcgtgggg katgtttaca ggccttcctt gctggggggg 240
ggccttatgc                                     350

<210> 410
<211> 306
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(306)
<223> n = A,T,C or G

<400> 410
ggctgggttg caagaatgaa atgaatgatt ctacagctag gacttaacct tgaaatggaa 60
agtccttgca tcccatctgc aggatccgtc tctgcacatg cctctgtaga gacgcagcatt 120
ccaggggacc ttgaaacacg ttggcaatgt aaggtgcttg ctcccmaaga cactctctaa 180
aagggtgtgt aaggttgaaa ccgccttctt tctttattgc ccttctctat ttatgtgaac 240
naatggtttg ctctctttgn atctttttta aatggaaag ttcaattgng aaatggaata 300
tccttgc                                     350

<210> 411
<211> 261
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(261)
<223> n = A,T,C or G

<400> 411
agagatattn cttaggtnaa agttccatga gttcccatag actatatgac tggccacaca 60
ggatcttttg tatthaagga ttctggagat ttgcttgagc aggattagat aaggctgttc 120
tttaaaagtc tgaattggaa cagatttcaa aaaaaaaccc cacaatctag ggtgggaaca 180
aggaaggaaa gatgtgaata ggttgatggg caaaaaacca atttaaccat cagttccagc 240
cttctctcaa gggaggcaa a                                     251

<210> 412
<211> 241
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(241)

```

<223> n = A,T,C or G

```
<400> 412
gttcaatgtt accctgaactt tctacaacac cccactcacc gatgtattcg ttgcccaagt 60
ggacactacc agcctgaatt tggaaaaaat aattgtgttt cttgccccagg aaatactacg 120
actgactttg atggctccac aaacataaac cagtgtaaaa acagaagatg tggaggggag 180
ctggagattt tcaatgggta cattgaatc ccaactaac caggcaatta cccagccaac 240
a 241
```

<210> 413

<211> 231

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(231)

<223> n = A,T,C or G

```
<400> 413
aactcttaca atccaagtga ctcatctgtg tgcctgaatc cttccactg tctctctccc 60
ctcatccaag ttcttagtac ctctcttttg ttgtgaagga taatcaaac aaacacaaa 120
aagtttactc tctctatttg gaacctaaaa actctcttct tcttgggtct gaaggtctca 180
agatctcttg aatcatttct cagatcattg gggacccan atcaggaacc t 231
```

<210> 414

<211> 234

<212> DNA

<213> Homo sapiens

```
<400> 414
atgtccatg aagcactgag cagaagctgg aggcacacag caccagacac tccagcagag 60
gatggagctg aaacactaac ccaactctgt cttggaggac tgggaagcct agagaaggct 120
gtgagccaaq gaggggagggt ctctcttttg catgggatgg ggaatgaagta agggagggga 180
ctggaccccc tgggaagtga ttactatagg gggggggtgt attgaagtcc tcca 234
```

<210> 415

<211> 217

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(217)

<223> n = A,T,C or G

```
<400> 415
gcataaggatt aagactgagt atctcttcta caktcttcta accttctaaq gggcactttt 60
caaaacacag accaggtagc aaatctccac tgccttaagg ttctcaaccac cactttctca 120
caactagcaa tagtagaatt cagtctact tctgaggcca gaagaatggt tcaagaaaaa 180
attggatat aaacataaac aattaagaaa aataatc 217
```

<210> 416

<211> 213

<212> DNA

<213> Homo sapiens

<220>

```

<221> misc_feature
<222> (1)...(213)
<223> n = A,T,C or G

<400> 416
atgcataatnt aaaggaactt gccctgcctt tagaagacat ctggnetgct ctctgcattga 60
ggccacagcag taagactctt tgattccag aatcaagaac tctcccttc agactattac 120
cgaatgcag gtggtaatt gaagccact aattgctgct caaatagaag gatattgact 180
atattggaac agatggagtc tctactacaa aag 213

<210> 417
<211> 303
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(303)
<223> n = A,T,C or G

<400> 417
nagctcttcag gcccatcagg gaagttcaca ctggagagaa gtcatacata tgtactgtat 60
gtgggaagagg cttactctct gcttcaaatc tccaagccca tcagagagtc cacactggag 120
agaagccata caaatgcact gagtctggga agagcttcag gagggtattcc catattccag 180
tctactcagt ggtccacaca ggagagaaac cctataatg tgagataatg ggaagggct 240
tcantcaag ttgtatctt caaatccatc ngaaggacca cagtatanan aaacctttta 300
agt 303

<210> 418
<211> 328
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(328)
<223> n = A,T,C or G

<400> 418
tttttggcgg tggtgggcca gggacgggac angagcttca ctctgttgc caggctggag 60
tgccacaggca tgatctcggc tcactacaac cctgcctcc catgtccaaag cgtattcttgt 120
gccctcagcct tccctgttag tagaattaca ggcacatgcc accacaccca gctagttttt 180
gtatttttag tagagacagc gtctcccatc gttggccagg ctggctctaa actcctnacc 246
tcagnggtca ggtctgtctc aaactcctga cctcaagta tctgccacc taagctccc 300
aaagtctan gattacagcc cgtgagcc 328

<210> 419
<211> 389
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(389)
<223> n = A,T,C or G

<400> 419
ctctctcaag aaggcctgtg gtccgctcc cggcaaccaa gaagcctgca gtgcattatg 60

```

```

acccttgagc catggactgg agcctgaaag gcagcgtaca cccctgctct gatctgtgtg 120
cttgtttctt ctctgtggct ccattccatg cacagttggt gcactgaggc tgtgacgggc 130
cgagcaaggc caagctggct caaagagcaa ccagccaact ctgccacggg gtgccaggca 240
ccggttcttc agccacacac ctcaactcgt ccgcgaatg gcacatcagt tctttacc 360
taaaaggtagg acraaagggc atctgctttt ctgaagtcct ctgctctakc agccatcagc 360
tggcagccac tcnngctgtg tcgacgcgg

```

<210> 420

<211> 408

<212> DNA

<213> Homo sapiens

<400> 420

```

gttctccca actcctgcca gaacacagctt tcttaacat gagagctgca cccctctctc 60
tggccagggc agcaagcttt agccttggct ccttgittct gcttttttct tggctagacc 120
gaagctgtact agccaaggag ttgaagtctt gacttttgt gtttggcat ggagacgcaa 180
gtcccaattga cactcttccc actgaaccca taagggaatc ctcatggcca caaggatttg 240
gcccaactcac ccagctgggc atggagcaga attatgaact tggagagtat ataaagaaga 300
gatataagaa attcttgaat gactctata aacatgaaca ggtttatatt cgaagacagc 360
acgttgacgg gactttgatg aagtgtatg acaaacctgg caagcccg 408

```

<210> 421

<211> 392

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(352)

<223> n = A, T, C or G

<400> 421

```

gtccaaaaat ctttttactg atnggcabtg ctacacacat atgactattc acggaggcca 60
gaggagaaat aggcctggcc tgggagccct gtgcttacta naagacattc agattatcca 120
tccactgaca gaacagggtct tttttgggtc ctctctctcc accacacatc actctgagtc 180
ctctctcttg aagattcttt ggcagttgtc ttgtcatata cccacagggt tagaacaaga 240
gggtcaaatc gaattttctg ttctgtagca agtgcatgtc tcacaagttg gcangtctgc 300
cactccagct ctattgggtg ttgttctctc ttgagatcca tgcattctcc gg 352

```

<210> 422

<211> 337

<212> DNA

<213> Homo sapiens

<400> 422

```

atgccaccat gctggcaatg cagcgggggg tcyaaagcct gcatatccag cccagagctgg 60
cgatgatcga cggcaacogt tgcgccgaagt tgcogctgoc agcggaaagc gtcgtcaagg 120
gcgatagcaa ggtgcggcgg atcgcggggg cgtcaactct ggccaaggtc agcgcgtgatc 180
tgaaaatggc agctgtcgaa ttgatctacc cgggttatgg catcggcggg cataaagggtc 240
atccgacacc ggtgcacctg gaagccttgc agcggctggg gcgcagcccg attcacggac 300
gctctctcog ccgggtacggc tggcctatga aaatttat

```

<210> 423

<211> 310

<212> DNA

<213> Homo sapiens

<220>

```

<221> misc_feature
<222> (1)...(310)
<223> n = A,T,C or G

<400> 423
gctcaaaaat ctttttactg atatggcatg gctacacaat cattgactat tagagggcag 60
aggagaatga ggcctggcct gggagccctg tgcctactan aagcncetta gattatccat 120
tcaotgcacg aacagggtct ttitgggtct tictttctca ccacgatata cttgcagttc 180
tcctttctga agattctctg gcagttgtct ttgtcataac ccacagggtg ahaaacaagg 240
gtgcacacat aaatttctgt ttgttagcaa gtgcattgtc caccagttgc aagttctgcc 300
tcagatthta
310

<210> 424
<211> 370
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(370)
<223> n = A,T,C or G

<400> 424
gctcaaaaat ctttttactg ataggcatgg ctacacaatc attgaactat agagggcaga 60
ggagaatgag gcttggcctg ggagccctgt gcttactaga agcacattag attatccatt 120
cactgcacga acagggtctt ttitgggtct tctttctcac caccatatac ttgcagttct 180
cctttctgaa gattctcttg cagttgtctt ttgtcataac caccagttgt gaaacattct 240
gggtgaactc cctgggaact cctcattagg tatgaatag catgatgat tgcataaagt 300
caagagggtg gcaaatatca caacgtctgc cagganaaca ttcatktgtg taagcaggac 360
tcctgcagac
370

<210> 425
<211> 216
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(216)
<223> n = A,T,C or G

<400> 425
aattgtattn ntthattttg caactcaaaa taathacca aaaaaaaa tnttaaatga 60
caacaacnea acatcaaggc aanaanaaca ggaatggntg actnrgcata aatnggccga 120
anattatcca ttatntaag ggttgacttc aggtatagc acacagacaa acatgccacg 180
gaggtatcca ggaacgctcg atgtnttnty agggag
216

<210> 426
<211> 596
<212> DNA
<213> Homo sapiens

<400> 426
cttcacagta gataaacct gtggccccg gccgaggttc tccattagc tctgattgat 60
tggcagtcag tgatgaagg gtgtttctga ctttctgact gcccaagggt tgcctggcca 120
gctctcctgt ttgttgagtt ggcagtagga ccttactttg taattaaagg tagatgggtg 180
gtgttctctg tatcttgatt aacctaatgt ccttcacagc acgactcgga ttcatctgga 240
gacatcaggc caacttttaa tgaatgatt tgaagggcc ttaagaggca ctctccgtta 300

```



```

ttaggcagctt catctgcaact gataacttct tggcagctga gctggtcggg gctgtggccc 360
aaacgcacac ttggcttttg gttttgagat acaactctta atcttttagt catgcttgag 420
gggtggatggc cttttcagct ttaacccaat ttgcactgcr ttggagagtg agccaggaga 480
atacactcat atactcgtag gcttagaggc cacagcagat gtcatttggt tactgcutga 540
gtcccgctgg tcccatecca ggaccttcca tggcgagta cctgggagcc cgtgct 596

```

```

<210> 427
<211> 107
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(107)
<223> n = A,T,C or G

```

```

<400> 427
gaagaattca agttaggttt attcaagggt ttacnagaga atcctanacc taggncccag 60
cccggaagca gccctanaga gctcctgttt gaactgcocgg ctacagg 107

```

```

<210> 428
<211> 38
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(38)
<223> n = A,T,C or G

```

```

<400> 428
gaactctcca anaagactt tattcaatat ttacact 38

```

```

<210> 429
<211> 544
<212> DNA
<213> Homo sapiens

```

```

<400> 429
ctttgtcggg oggaataaaa gtggacgcaa gcatgacctc ctgatgaggg cgtctcattt 60
attgagagagc ggtctgagcc ctgoggtttca gattaaaaac ogagaattgt atagacgccc 120
atatccacga actcttgaag gactttctga ttatcccaca atcaaatcat cgggttttcag 180
tttgatgggt ggttcatacao ctgtagaacc tgaactggcc gtgggtggaa tcaactcgtt 240
gccttcacac tcagttacac ctactcaac atcctctcct gttggtctgt tgcgtcttca 300
agatactaag cccacatttg agatgcagca gccctctccc caaattcttc ctgtccatcc 360
tgatgtgcag ttaaaaaaat ttgcctttta tgatgtccct gatgtttcca tcaagccca 420
gagtttagtt caaagcagta ttacagcatt tcaagagaag ttittttatt ttgctttgac 480
acctcaacaa gtttagagaga tatgcataac caggggtttt ttgccagggt gttagagaga 540
ttat 544

```

```

<210> 430
<211> 507
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(507)

```

<223> n = A,T,C or G

```

<400> 430
cttatcncaa tggggctccc aaacttggtc gtgcagtgga aactcggggg gaattttgaa 60
gaacactgac acccatcttc caccctcgaca ctctgattta attgggctgc agtgagaaca 120
gagcatcaat ttaaaaaagt gccccagaatg ttntctctgg cagcgttggtg atctttggcc 180
ccttgctgac ttatgcaat gcatcatgct atttcatacc taatgaggga gtccaggag 240
attcaaccag gatgtttcta cncctgtggg ttafgacaaa gacaaactgc aaagaatntt 300
ccagaaggag gaactgcagt atatcgtggt ggagaagaaag gacccaaaaa agacctgttc 360
tgtcactgaa tggataaatc aatgtgttct tagt.aggcac agggctccca ggccaggcct 420
cattctctct tggcctctaa tagtcaatga ttgtgtagcc atgoccatca gtaaaaaagt 480
ttttggcaca aaaaaaaaa aaaaaaa

```

<210> 431

<211> 392

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1)... (392)

<223> n = A,T,C or G

```

<400> 431
gaaaattcag aatggataaa aacaaatgaa gtacaaaata ttccagattt acatagcgat 60
aaacagaaaa gcacttatca ggaggactta caaatggaag tacactctan aaccatcatc 120
tatcatggct aaatgtgaga tttagcacagc tgtattattt gtacattgca aacacctaga 180
aagagatggg aaacaaatcc ccaggagttt tgtgtgtgga gtctctgggtt ttccaaacaga 240
catcatccca gcattctgag attaggngga ttggggatca ttctggagtt ggaatgttca 300
acaaaagtga tgttgttagg taaaatgtac aacttctgga tetatgcaga cattgaaggt 360
gcaatgagtc tggcctttac totgtgttt ct

```

<210> 432

<211> 387

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)... (387)

<223> n = A,T,C or G

```

<400> 432
ggatcctcta cataatcaaa tatagctgta gtacatgttt tcaatggngt agattaccac 60
aaatgcaggc caaatgtgtt agatctcttg ttttatcttt ttgtctataa tactgtattg 120
ngtagtccaa gctctcggna gtccaggcac tynaaacat gctcccttta gatlaacctc 180
gtggacactn ttgttgnaat gtctgaactg tagngccttg taktttgctt ctgtcrgnga 240
attctgttgc ttctggggca ttctcttgng atgcagagga ccaccacaca gatgaacgna 300
atctgaattg ntccaatcac agctgcgatt aagacatact gaattcgtac aggarccggga 360
aacaactata gaacactgga gtctcttt

```

<210> 433

<211> 281

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)... (281)

<223> n = A, T, C or G

<400> 433

```

ttcaactagc anagaanaact gcttcagggn gtgtaaaatg aaaggcttcc acgcagttat 60
ctgattaagc aacctaaaga gagggaacag gctagaagcc gcaggatgtc tacactatag 120
caaggcnctat ttgggttggc tggaggagct gtggaaaaac tggagagatt ggagctggag 180
atcgccgttg stattcccon ttgntattac accagagagg ntctcgtnt gcccaactgg 240
ttnaaaaacg xtatacaata atgtatagaat aggaacacaa t 281

```

<210> 434

<211> 484

<212> DNA

<213> Homo sapiens

<400> 434

```

ttttaaaaa agcattttagt gctcagtcoc tactgagtac tctttctctc ccttcccttg 60
aatttaattc ttccaacttg caatttgcaa ggattacaca ttccactgtg atgtatatag 120
tggttgcaaa aaaaaaaagt gtctttgttt aaaattactt ggtttgtgaa tccactctgc 180
tctttcccca ttgggaactag tcaattaaac atctctgaac tggtagaana aaactctgag 240
agctagctta tccgcatctg acaggtgaat tggatgggtc tcagaacctt tccaccacga 300
cagctgtttt ctatcctgtt taataaatta gtttgggttc tctacatgca taacaaaccc 360
tgctcaactc tgcacataa aagtcctgtg cttgaagttt agtcagacc cccaccacac 420
tctatttttc taagtgtttt tggcaacata tgagtgtttt gaasataaag tacccatgtc 480
ttta 484

```

<210> 436

<211> 424

<212> DNA

<213> Homo sapiens

<400> 436

```

gggcgcgtca gaggcagcca ctttctgcct tccagctcct ccttcaagga agccccatgt 60
gggttagctt caatatcgca ggttcttact cctctggttc tataagctca aacccaccaa 120
cgatcgggca agtaaacccc ctccctcgcc gacttcggaa ctggcgagag ttacagcgac 180
atgggcctat ggggaggggg caagatagat gagggggagc ggcctggltgc ggggtgaccc 240
cttggagaga ggaaaaaagg cacaagaggg gctgcacccg ccactaaagg agatggccct 300
ggtagagacc ttggggggtc tggaaacctt ggcctccca tgccttaact cccacactct 360
gctatcagaa acttaaaact gaggattttc ttgtttttc actcgcaata aattcagagc 420
aaac 424

```

<210> 436

<211> 667

<212> DNA

<213> Homo sapiens

<226>

<221> misc_feature

<222> (1)... (667)

<223> n = A, T, C or G

<400> 436

```

accttgggaa nactctcaac atataaaggg togtagactt tactccaat tccaaaaagg 60
tcctggccat gtactctcga aagttttccc aaggtagcta taactctctt ataaggggtc 120
aguctctctt ggaattctcc tgatttcaaa gtctcaactc caagttctct aaaaaggggg 180
cagttctcga aaggcaggtt taqcaactga tcttcagaaa gaggaaactgt gtgcacgggg 240
atgggctgcc agagtaggat aggatccag atgtctgac cttctggggg aaacagggct 300
ggcaggtttg tcatagactt nctcaagtc cggtcgaagt ctgtgctctg aatataaacc 360

```

```

tggttcattgt  tataggactc  attcaagaat  ttctatatcc  tcttctcttat  atactctcca  420
agttctcaaat  gctgctccat  gccagctgg  gtgagttggc  caaatccttg  tggccatgag  460
gattccttta  tggggtcagt  gggaaaggtg  tcaatgggac  ttccgtctcc  atgcogaaac  540
accaaagtca  caaacctcaa  ctctctggct  agtacacttc  ggtctagcca  gaaaaaaagc  600
agaaacaaag  agccaaagct  aaggettgct  gccctgcacg  gagggagggg  gcagctctca  660
tggtgag

```

```

<210> 437
<211> 693
<212> DNA
<213> Homo sapiens

```

```

<400> 437
ctacgtctca  accctcaatt  ttaggtaagg  aactttaagt  ccaaagatat  taagtgactc  60
acacagccag  gtaaggaaag  ctggattggc  acactaggac  tctarctac  cgggttttgt  120
taaaagctcag  tttaggaggg  tgataagcgt  gaaaggaact  ccaggcagct  ttttcagctc  180
ataaaagata  attcttagcc  catgllcttc  tctagagdag  acctgaaatg  aacgacagag  240
aggtactctct  ctatttctac  cctctttgct  tctactctct  ggcagtcaga  cctgtgggag  300
gccatgggag  aaagcagctc  tctggatggt  tgtacagatc  atggactatt  ctctctggac  360
calttctcca  ggttacctca  ggtgtcacta  ttggggggac  agccagcact  ttaagcttca  420
atttgagttt  ctgtctgtct  tcaagttagg  aaccttttgc  tcttcacact  tcaactctga  480
acacctaact  gctgttgcct  ctgaggtggg  gaaagacaga  tatagagctc  acagtattta  540
tctattctct  aggcactgag  ggcctggggg  caccttctgg  tgcacaaaca  gatctctgtt  600
taaggacatg  ttgcttcaga  gatgtctgta  actatctggg  ggcctctgtg  gctctttacc  660
ctgcatcatg  tgcctctctg  gctgaaaaag  acc

```

```

<210> 438
<211> 360
<212> DNA
<213> Homo sapiens

```

```

<400> 438
ctgcatatca  caatgaagct  tctctggggc  agcgttgtga  tctttggcac  ctctctgact  60
ttatgcgaat  catcatgcta  ttctatacct  aatgagggag  ttccaggaga  tcaaccaggg  120
atgtttctac  acctgtgggt  tatgacaaag  accactgcca  aagaatcttc  aaggaaggag  180
actgcaagta  tatctgtgtg  agaagaagga  cccaaaaaag  aactgttctg  tcaagtgaatg  240
gataatctaa  tgtcttctca  gtaggcacag  ggtcccagag  ccaggcctca  tctctctctg  300
gcctctaaata  gtcaataatt  gtgtagcaat  gccatccagt  aaaaagattt  ttgagcaaac  360

```

```

<210> 439
<211> 431
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(431)
<223> n = A,T,C or G

```

```

<400> 439
gttccctnhta  actctgccca  gaaaacagctc  tctcaacat  gagagctgca  cccctctccc  60
tggccagggc  agcaagcctt  agccttggct  tcttgtttct  gcttttttct  tggctagacc  120
gaaagtgtact  agccaaaggag  ttgaagtttg  tgacttttgt  gtttggccat  ggagaccgaa  180
gtcccatgga  accctttccc  actgacccca  taagggaatc  ctactgggca  caaggaattg  240
gccaactcac  cagctggggc  atggagcagg  atkatgaact  tggagagtat  aaaaqaaga  300
gatcatgaaa  attcttgagt  gagtctcata  aacatgaaca  ggtttatatc  cyagacacag  360
aggttgaccg  gactttgatg  agtgcataga  caaacctggc  agcccgctga  agggcccgcg  420
aatttagtag  t

```

```

<210> 440
<211> 523
<212> DNA
<213> Homo sapiens

<400> 440
agagataaag cttaggccaa agtccataga gtcccataga actatatgac tggccacaca 60
ggatcctttg taactaaggga ttcgagatt ttgcttgagg aggatttagat aaggcgttcc 120
tttcaaatgtc tgaatatggaa cagattttcaa aaaaaaaccc cacaatcttag ggtgggaaca 180
aggaagagaaa gatgtgaata ggcgtatggy caaaaaacaa attaccccat cagttccaga 240
cttctctnaa ggagaggcaa agaaaggaga taccgtggag acatctggaa agttttctcc 300
actggaaaac tgnactatc tgtttttata ttctgtttaa aatatatgag gctacagaa 360
taaaaattaa acctcttly tgtcccttgg tcttggaaca ttatgttcc tttaaagaa 420
acaaaaatca aactttacag aaagatttga tgtatgtaat acatatagca gctcttgaag 480
tatatatatc atagcaata agtcatttga tgaagaacag cta
523

<210> 441
<211> 430
<212> DNA
<213> Homo sapiens

<400> 441
gttctctcta actcctgcca gaacacagctc tctccaacat gagagcttga cccctcttcc 60
tggcaggggc agcaagacct agccttgget tcttgtttct gcttttttcc tggcctagac 120
gaagtgtact agccaaggag ttgaagtttg tgactttggt gtttcggcat ggagaccgaa 180
gtccacttga accttttccc actgacccca taaaggaate ctcatggcca caaggatttg 240
gcaactccc ccagttgggc atggagagac attatgaact tggagagtat ataaagaaaga 300
gatatggaaa attcttgaaat gattctctata aacatgaaca gttttatatt cgaagccag 360
acgttgaccg gactttgatg agtgcctatga caaccttggc agcccttga cygcggccg 420
aattttagtag
430

<210> 442
<211> 362
<212> DNA
<213> Homo sapiens

<400> 442
ctaaaggaatt agtagtgttc ccatcacttg tttggagtgt gotattctaa aagattttga 60
tttctctgaa tgcacattat attttaactt tggctgggga aagagttata ggcacacagt 120
cttccacttct gatactttga aatttaactt ttatgttcat tgttttgacc ataaagctat 180
atgtttgaaa atggtctatt taaggaaaaa ttagaaaaat tccgataata gtccagaata 240
aatgaattaa tgttttactt aatttatatt gaactgtcaa tgacaaataa aaattctttt 300
tacttatatt tggtttctat ttacaggaaat aaaaactaag aattaaagt ttgactacag 360
tc
362

<210> 443
<211> 624
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(624)
<223> n = A,T,C or G

<400> 443
tttttttttt gcaacacaaat atacatcaca gtgaattgtg taactcttgc aaattggaag 60

```

```

ttgaagaagt taacttcaga ggaggggaga gaaagagtae ttagtaggga ctgagccta 120
aatgcttact ttaaaagaaa tgtaaagagc agaaagcaat taaggtacc ctgctttttg 180
tgcgtggctag tactccggtc ggtgtcagca gcaagtggca ttgaacattg caatgtggag 240
cccaaacacc agaaaattgg gtgaatttgg ccaactttct attaacttgg ctctctgttt 300
tataaatat tgtgaataat atcacctact tcaaggggca gttatggagg tttaatgaac 360
taacgcttac aaacactta aacatagata acatagggtc aagtactatg taatcggtac 420
atggtaaac tecttattat taagttcaac gctaaaaatg atgtgtgtgc atatgtaac 480
agtacagaga gaggggaatt aaacaaacta agggccttga ggggaaggttt cotgggaaga 540
ngatgcttgt gctgggtcca aatcttggtc tactatgaac ttggcccaat tacttaaac 600
ttgtccctat ctgctaaaca gatac 624

```

```

<210> 444
<211> 425
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(425)
<223> n = A,T,C or G

```

```

<400> 444
gcacatcatt nntcttgcatt tctttgagaa taagaagatc agtaaatagt tcagaagtgg 60
gaagctttgt ccaggccctgt ggttgaaccc aatgttttgc ttagaastag aaacagtaag 120
ttcatctgta tagcdataaca caaaatttgc ataagtgggt gtacagcaaat ccttgaatgc 180
tgcttaattgt gagaggttgg taanaactct tbtgcaacac tctaaactcc tgaatgttt 240
gctgtgctgg gacctgtgca tgcacagacaa ggccaagctg gctgaaagag caacagaca 300
ctctcgcaat ctgcacacac ctgctggcag gatttctttt tgcatectgt gaagagccaa 360
ggagccacca gggcataagt gactagactt atggtcgacg cggccgcgaa tttagtagta 420
gtaga 425

```

```

<210> 445
<211> 414
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(414)
<223> n = A,T,C or G

```

```

<400> 445
catgtttatg ntcttggatt accttgggca cctagtgttt ctcaatcgtc tatcattcct 60
ctctgttttt caaagccaga gatggccaga gctcacaaca actgtattct caagcttttg 120
tgaattctct tgcactgtgc agattattgg atgtagtctt cttaacttag catataaac 180
tggtgtgttt cagataaatg aacagcaaaa tgggttggaa ttaacatttg gaacctcttg 240
aatgaaaaat bgtgtctcta gattatgtaa caataaacta ttctctaacc attgtctttt 300
ggatttttat aatcctactc acaaatgact aggcctctct tctgttattt tgaagcagtg 360
tggtgtctgg atgataaaa aaaaaaaaag tgcagcggcg cgcgaattta gtag 414

```

```

<210> 446
<211> 631
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(631)

```

<223> n = A,T,C or G

```

<400> 446
acaaattaga anaaagtgc agagaacacc acataccttg tccggaacat tacaatgggt 60
tcctgcatgca tgggaagtggt gaggcattcta tcaatatgca ggagccatct tgcagggtgtg 120
atgcctgggta tacttggacaa cactgtcgaaa aaaagggacta cagtggttcta taccgtgttgc 180
ccggtccctgt acgatttcag tatgtcttaa tcgagctgtt gatttgaaca attcagattg 240
ctgtcatctg tgytgytggt ctttgcatac caagggctaa actttaggta atagcatlgtg 300
accgagattt gtaaaccttc caaccttcca ggaatgtccc cagaagcaac agaattcaca 360
gacagagaca aatacaggg cactacagtt cagacaatcc cagaagggcg tccacgaggt 420
taattcaaaq ggagcatgtt tccacagtggt tggactaccg agagcttggg ctacacaaata 480
cagttattata gacaaaagaa taagacaaga gatctacaca tgttgccttg catttgggt 540
aatctacacc aacgaaaaca tgtactacag ctatatttga ttatgtatgg atatatattga 600
aatgtataac atgtctctga tgttttttct g

```

<210> 447

<211> 585

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(585)

<223> n = A,T,C or G

```

<400> 447
ccttgggaaa anttccaaa tataaaggggt cgtagacttt actccaaatt cnaaaaggt 60
cctggccatg taattcctgaa agttttccca aggtagctat aaatctctta taagggtgca 120
gcctctcttg gaattcctct gatttcaaaq tctcaactctc aagttcttga aaacgagggc 180
agttcctgaa aggcaggtat agcaactgat ctctcagaag aggaactgtg tgcacgggga 240
tgggtctgca gactaggata gpattcaga tgcagacac ttctggggga aacagggctg 300
ccaggtttgt catagccact atcaaaagtc ggtcaaatgc tgtgcttcga atataaaact 360
gttcatgttt ataggactca ttcagaatlt ttcctatct ctctcttata taattctcaa 420
gttctctaat ctgtctaatg ccacagctgg tgaatgggac aaatctctgt ggcctatgag 480
attctcttat aggggtcagtg ggaaggggt caatgggact tgggtctcca tgcagaaca 540
ccaaagtcac aaacttcaac tcttgggcta gtacactcgt gctca

```

<210> 448

<211> 93

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(93)

<223> n = A,T,C or G

```

<400> 448
tgctcgtggg tcattctgaa nhccgaactg acmtgcccag ccttgcgcga gggcchccat 60
ggctccctag tgcctctgag aggaaggggc tag

```

<210> 449

<211> 706

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1) ... (706)

<223> n = A, T, C or G

<400> 449

```

ccaagttcat gctntgtgct ggacgctgga caggggggcaa aagcnnctgc tctgtgggtca 60
tctctgancac cgaactgaac atgcagagccc tgcagatggg cctccatggc tccctagtgc 120
cctggagagg aggtgtctag tcagagagta gtcctggagag gtggcctctg naggagagcca 180
gggggacagg atcctgagga tggctggggcg cgtcccatte ggcattcagg ctggcgcaact 240
gttgggaagg gcgacggcg cgggctcttt cgtattatag ccagctggcg aaaggggggat 300
gtgctgcgaag gcgattaagt tgggtaagcc caggggtttc cvagtcnaga cgttgtaaaa 360
cgacggccag tgaattgaat ttagggtgacn ctatagaaga gctatgaagt cgcattgcaag 420
cgtacgttaag cttggatcct ctagagcggc cgcctactac tactaaattc gcggcgcggt 480
cgacgtggga tcnactcga gagagtgagg agtgacatgt gctggacnct gtccatgaag 540
cactgagcag aagctggagg cacaacgcnc cagacactca cagctactca ggaggctgag 600
aacaggttga acctggagg tggaggtkcg aatgagctga gatcaggcnn ctgcnctcca 660
gcattggatga cagagtgaa ctcactctta aaaaaaaaa aaaaaa 706

```

<210> 450

<211> 493

<212> DNA

<213> Homo sapiens

<400> 450

```

gagacggagt gtcactctgt tgcacagggt ggagtgagc aagacactgt ctacgaaaaa 60
acagttctaa aggtctaaaaa aacataaaaa gaatatcctc atagtggaaa taagagagtc 120
aaatgaggct gagaacttta caaagggtac ttcagacatc gtcgcaata tcaatgcattg 180
agcttaagt taagaaagaa ctttggggag aaacatcct ctgacagtga ggtacaaatc 240
caagtcaggt actgaaatgg gtygaattaa actcaaatc atcctgcccag ctgaacacga 300
agagacactg tcagagaggtt aaaaagtgag ttctatccat gaggtgattc cacagctctc 360
tcaagtcac acatctgtga actcacagac caagttctta aacactgtgt caaactctgc 420
tacaatccag actcaactgg agagctttac aaactccat tgcgagggt cgcagcgggc 486
gagaatttag tag 493

```

<210> 451

<211> 501

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1) ... (501)

<223> n = A, T, C or G

<400> 451

```

ggggcgctcc cacttggcat tcaggtctgg caactgttgg gaagggcgat cgggtcgggc 60
ctcttctgcta ttacgccaga tggcgaaagg gggatgtgct gcaaggcgat taagtgggt 120
aaagccagggt ttttccaggt tccgacgttg taatacagag gccagtgaaat tgaatttag 180
tgacnctata gaagagctat gacgtcgcat gcaagcgctac gtaagcttgg actcctaga 240
ggggcgctcc actactacta aattcgccgc cgggtcgagc tgggactcnc actgagagag 300
tggagagtga catgtctggt acnctgtcca tgaagcactg agcagaagct ggaggcaca 360
cgcnccagac actcacagct actcaggagg ctgagaaacg gttgaacctg ggaggtggag 420
gttgcaatga gctgagatca ggcncctgcn cccagcaatg gatgacagag tgaactcca 480
tcttaaaaaa aaaaaaaaaa a
501

```

<210> 452

<211> 51

<212> DNA

<213> Homo sapiens


```

<220>
<221> misc_feature
<222> (1)...(51)
<223> n = A,T,C or G

<400> 452
agacggtttc accnttacaac cnccttttag gatgggnutt ggggagcaag c      51

<210> 453
<211> 317
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(317)
<223> n = A,T,C or G

<400> 453
tacctctgac tttttcccca ttggaactag tcattaaccc arctctgaac tggtagaaaa 60
acatctgaag agctagtcta tcagcatctg gcaagtgaaat tggatgggtc tcagaaccat 120
ttcaccanaa cagcctgttt ctatcctgtt taataaatta gtttgggttc tctacatgca 180
taacaaaccc tgcctcaatc tgtcacataa aagtcctgta cttagagttt antcagcacc 240
cccacaaaaa tttatttttc tatgtgtttt ttgcaacata tgagtgtttt gaaaaaagg 300
taccatgttc tttatta                                     317

<210> 454
<211> 231
<212> DNA
<213> Homo sapiens

<400> 454
ttngaggtac aatcaactct cagagtgtag tttctttcta tagatgagtc agcattaata 60
taagccacgc caagctcttg aaggagtctt gaattctctt ctgctcaact agtgaaccca 120
agaagaccaa attctctgc atcccagett gcaaacaaaa ttgttcttct aggtctccac 180
ccttctcttt tcagtgttcc aaagctcttc acaatttcat gaacaacagc t      231

<210> 455
<211> 231
<212> DNA
<213> Homo sapiens

<400> 455
taccaaagag ggcataataa tcagtctcac agtagggttc accatctctc aagtgaaaaa 60
ctttgttcgg aaagggcttt ccacaggcta caccacaaaa acaggaaaca tgcgaagttt 120
gtttcaacgc attgatgact tctccaagga tcttcttttg gaatcgacca cattcagggg 180
caaagaattt ctctagtcac agtctcaaat acagggtctc tttctctctt s      231

<210> 456
<211> 231
<212> DNA
<213> Homo sapiens

<400> 456
ttggcaggta cctttacaaa gaagaccca taccttaigc gttattaggt ggaataatca 60
ttccattcag tattatggtt attattcttg gagaacccct gctgttttac tgttaacctt 120
tgcaactcaa ttcctttatc aggaataaact acatagccac tatttacaaa gccattggaa 180

```

```

cccccttttatt tgggtgcagct gctagtcagct cccctgactga cattgcccag c      231

<210> 457
<211> 231
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(231)
<223> n = A,T,C or G

<400> 457
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tatttgattt cattagcaat ctcttcaga agaccttga gatcaataag ctctgtatcc 180
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<210> 458
<211> 231
<212> DNA
<213> Homo sapiens

<400> 458
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acacccctaac ctgggtaac agcatcttga atatcattt gggatgagta gaatttccaa 180
gtctctgggtt taggcatttc gggggggccag accccaggag aagaagattc t      231

<210> 459
<211> 231
<212> DNA
<213> Homo sapiens

<400> 459
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gccctgcact gtttctcttc caaccagcc atcctgtccc tcaattggctc tgtgctctcc 180
actatcacaca gtctcccttc caatgagaaa caagaaggag cccctctccc a      231

<210> 460
<211> 231
<212> DNA
<213> Homo sapiens

<400> 460
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ccacctctcc ccacagaca cggccagcct ggagcccaca gaagggtctct cctcagccca 180
gggagagcttg gtccagcttc cagtccaccc ctaccaggct taaggataga a      231

<210> 461
<211> 231
<212> DNA
<213> Homo sapiens

<400> 461
cgaggtctga gaagctctaa tgtgaagggg agccgagaag caggcggcct agggaggggtc 60

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gagtggtgtc cagaagagctg tgtgcatgcc agaggggaaa caggcgccctg tgtgtcctgg 120
gtgggggttca gtgagagagtg ggaatttggt tcagcagaaac caagccgttg ggtgaataag 180
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<210> 462

<211> 231

<212> DNA

<213> Homo sapiens

<400> 462

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gaagaactct tagagagacc aacagggttag tgggttagag atttcacagag tattacattt 180
tcagagaggag gtatttaatt tctctcact catccagtgt tgtatttagg a 231

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<210> 463

<211> 231

<212> DNA

<213> Homo sapiens

<400> 463

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tactccagcc tggtagacaga gggagagccct atcaccgcc cccaccacc caaaaaaaaa 60
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caattgacag gtgtcttttc ctctggacct cgggtgtccc atctgagtga gaaagggtag 180
tcgggagggtg gatcttccag tcgaaggcgt atagaagccc gtgtgaaaaa c 231

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<210> 464

<211> 231

<212> DNA

<213> Homo sapiens

<400> 464

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gtactctaa gttttatcta agttgccttt ttgggggtgg aaagttaa cttagtgaat 60
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ctgtctcag tgactgtgtg cctgtagccc cagctctctg ggaagtctgt tgaggccagg 180
ggtgcagagc caaccgttag atgtctgtta acttctagg cccattttcc c 231

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<210> 465

<211> 231

<212> DNA

<213> Homo sapiens

<400> 465

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catgttgttg tagctgtggg aatgttggct gcactctcaga cagggttaac ctcaagctct 60
gtggpaaatt agcaacaaat tctgacatca tatttatggt ttctgtatct ttgtgtatga 120
aggtatggac aactttttgt tgtgttcata atatactcag attagttcag ctccatcaga 180
taaaatggag acatgcaggga tattaaggga gtgtgtgagc tctgttaaat a 231

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<210> 466

<211> 231

<212> DNA

<213> Homo sapiens

<400> 466

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caggtaacctc ttccactgg atactgtgct agcaagcatg ctcccgggg ttttttaaat 60
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cctgtgcaat caaattattgt ggagaattcc ctagctggag aagtcacaaa gaactatagg 180
aataatggag acagttccca caagatgaca accagtcggt gtgtgcggct g 231

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<210> 467
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 <212> DNA
 <213> Homo sapiens

 <400> 467
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 ctgcagcaga c 311

 <210> 468
 <211> 3112
 <212> DNA
 <213> Homo sapiens

 <400> 468
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<210> 469

<211> 2229

<212> DNA

<213> Homo sapiens

<400> 469

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cctttcttgc atgaagtaag atagtcaact tattcaaaa ttatcacatcc tctagatgta 480
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aatggaatt

2229

<210> 470

<211> 2426

<212> DNA

<213> Homo sapiens

<400> 470

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<210> 471

<211> 812

<212> DNA

<213> Homo sapiens

<400> 471

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<210> 472

<211> 515

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1)...(515)

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<400> 472

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<210> 473

<211> 5829

<212> DNA

<213> Homo sapiens

<400> 473

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gatggacact ttatgctcttt aatggatctt aagttaatat ttctataaag gctgtgtcac 240
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<212> DNA

<213> Homo sapiens

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His Gly Asp Ile Thr Met Gln Ile His His His Ser Gly Ala Val
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<210> 479

<211> 222

<212> PRT

<213> Homo sapiens

<400> 479

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35 40 45

His Gly Asp Ile Thr Thr Trp Thr His Cys His Thr Thr Thr Gly Thr
50 55 60

Arg Asp Ile Thr Leu Ser His Gly His Thr Ile Thr His Met Asn Thr
65 70 75 80

Pro Thr His Cys His Met Asp Thr Ala Thr His Thr Ala Thr Leu Ser
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His Gly His Thr Ser Ile Pro Ser His His His Thr His Cys His Val
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Asp Thr Arg Thr His Arg His Cys His Thr Asp Thr Gln Asn Thr Val
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Thr Arg Arg His His His Ala Asp Thr Pro Pro His Gly His Ser Thr
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Arg His Ser Ala Thr Gln Ile His His His Thr Glu Met Arg Thr His
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Cys His Thr Asp Thr Thr Thr Ser Leu Pro His Phe His Val Ser Ala
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 35 40 45
 Asp Phe Met Phe Lys Cys Arg Lys Gln Pro Gly Leu Pro Pro Ser Gly
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 Asp Arg Leu Thr Trp Ser Ser Val Ser Val Ala Gly Val Cys Ala Cys
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 35 40 45
 Leu Ser Gly Cys His Leu Met Ala Asp Gly Ala Lys Ala Leu Gly Lys
 50 55 60
 Ala Asp Gly Pro Trp Pro Tyr Leu Phe Val Arg Arg Thr Asp Val Pro

[illegible]

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<210> 482
<211> 143
<212> PRT
<213> Homo sapiens
```

4003 482

Met	Glu	Pro	Tyr	Arg	Gly	Asn	Lys	Lys	Gln	Val	Gln	Glu	Lys	Gly	Val
					5				10					15	
Pro	Cys	Leu	Trp	Gly	Ser	Ser	Pro	Cys	Leu	Arg	Cys	His	Met	Ala	Leu
					20				25					30	
Arg	Ala	Ser	Trp	Leu	Pro	Gly	Gly	Gly	Pro	Gln	Ala	Ile	Leu	Gly	Arg
					35			40					45		
Thr	Leu	Cys	Ser	Ser	Ala	Glu	Ser	Ser	Gln	Asp	Cys	His	Pro	Gly	Gly
						55						60			
Pro	Ser	Ile	Ala	Leu	Ala	Lys	Pro	Cys	Arg	Gly	Val	Trp	Leu	Leu	Phe
						70				75					80
Glu	Pro	Ala	Trp	Pro	Pro	Trp	His	Ala	Arg	Ala	Pro	Gly	Ala	Gly	Thr
						85			90					95	
Leu	Leu	Arg	Val	Cys	Leu	Ser	Cys	Leu	Gly	Cys	His	Leu	Cys	Gly	Gly
					100				105				110		
Ala	Ser	Gly	Gly	Gly	Gly	Pro	Ala	Thr	Asn	Leu	Thr	Gln	Ser	Arg	Lys
					115			120					125		
Trp	Met	Ala	Met	Phe	Pro	Gln	Pro	Glu	Trp	Leu	Pro	Pro	Asp	Gly	
					130			135				140			

$\langle 2\bar{1}0 \rangle$	48.3
$\langle 2\bar{1}1 \rangle$	84.3
$\langle 2\bar{1}2 \rangle$	PRT

<213> Homo sapiens

<400> 483

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Met Glu Thr Gln Arg Gly Asn Lys Gln Arg Ala Gln Glu Gln Gly Val
      5                               10                               15

Cys Cys Leu Trp Gly Ser Ser Pro Cys Leu Gly Ser Tyr Gly Thr Ala
      20                               25                               30

Gly Phe Leu Val Ala Lys Arg Arg Thr Thr Gly Leu Leu Glu Glu Asp
      35                               40                               45

Phe Thr Phe Lys Cys Arg Lys Gln Pro Lys Leu Pro Ser Met Arg Leu
      50                               55                               60

Ser Leu Leu Trp Pro Trp Arg Asp Leu Lys Phe Val Pro Arg Gln Asp
      65                               70                               75                               80

Lys Leu Thr Arg Ser Ser Val Ser Val Ala Gly Ala Tyr Ala Cys Arg
      85                               90                               95

Ala Gly Pro Gly Trp Leu Lys Gln Gln Pro Ala Thr Ser Ala Arg Val
      100                              105                              110

Arg Leu Val Glu Ala Glu His Pro Pro Pro His Pro Leu Glu Glu Val
      115                              120                              125

Gly Met Ala Arg Phe Pro Gln Pro Glu Cys Leu Pro Pro Tyr Cys
      130                              135                              140

```

<210> 484

<211> 30

<212> PRT

<213> Homo Sapien

<400> 484

```

Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly Phe
  1      5      10      15

Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile
      20      25      30

```

<210> 485

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 485

gggaagctta tcaacctatgt gccgcctctg c

31

<210> 486

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 486
gagaattctc acgctgagta ttggcc 27

<210> 487
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 487
ccgaattct tagctgccca tcgaagccc ttcatc 36

<210> 488
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 488
gggaagcttc tccccggct gcaccagctg tgc 33

<210> 489
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 489
Met Asp Arg Leu Val Gln Arg Phe Gly Thr Arg Ala Val Tyr Leu Ala
1 5 10 15
Ser Val Ala

<210> 490
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 490
Tyr Leu Ala Ser Val Ala Ala Phe Pro Val Ala Ala Gly Ala Thr Cys
1 5 10 15
Leu Ser His Ser 20

<210> 491
<211> 20
<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 491

Thr Cys Leu Ser His Ser Val Ala Val Val Thr Ala Ser Ala Ala Leu
1 5 10 15
Thr Gly Phe Thr
20

<210> 492

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 492

Ala Leu Thr Gly Phe Thr Phe Ser Ala Leu Gln Ile Leu Pro Tyr Thr
1 5 10 15
Leu Ala Ser Leu
20

<210> 493

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 493

Tyr Thr Leu Ala Ser Leu Tyr His Arg Glu Lys Gln Val Phe Leu Pro
1 5 10 15
Lys Tyr Arg Gly
20

<210> 494

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 494

Leu Pro Lys Tyr Arg Gly Asp Thr Gly Gly Ala Ser Ser Glu Asp Ser
1 5 10 15
Leu Met Ile Ser
20

<210> 495

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 495

Asp Ser Leu Met Thr Ser Phe Leu Pro Gly Pro Lys Pro Gly Ala Pro
 1 5 10 15
 Phe Pro Asn Gly
 20

<210> 495

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 496

Ala Pro Phe Pro Asn Gly His Val Gly Ala Gly Gly Ser Gly Leu Leu
 1 5 10 15
 Pro Pro Pro Pro Ala
 20

<210> 497

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 497

Leu Leu Pro Pro Pro Pro Ala Leu Cys Gly Ala Ser Ala Cys Asp Val
 1 5 10 15
 Ser Val Arg Val
 20

<210> 498

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 498

Asp Val Ser Val Arg Val Val Val Gly Glu Pro Thr Glu Ala Arg Val
 1 5 10 15
 Val Pro Gly Arg
 20

<210> 499

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 499
 Arg Val Val Pro Gly Arg Gly Ile Cys Leu Asp Leu Ala Ile Leu Asp
 1 5 10 15
 Ser Ala Phe Leu
 20

<210> 500
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> Made in a lab

<400> 500
 Leu Asp Ser Ala Phe Leu Leu Ser Gln Val Ala Pro Ser Leu Phe Met
 1 5 10 15
 Gly Ser Ile Val
 20

<210> 501
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> Made in a lab

<400> 501
 Phe Met Gly Ser Ile Val Gln Leu Ser Gln Ser Val Thr Ala Tyr Met
 1 5 10 15
 Val Ser Ala Ala
 20

<210> 502
 <211> 414
 <212> DNA
 <213> Homo Sapien

<220>
 <221> misc_feature
 <222> (1)...(414)
 <223> n = A,T,C or G

<400> 502
 caccatggag acaggcctgc gctggctttt cctggctgct gtgctcaaaag gtgtccaatg 60
 taagtgggtg gaggagtccg ggggtggcct ggtccagcct gggacacett tgacantac 120
 ctgtagagtt ttgtgaatcg acctcagtag caatgcacat agctgggtcc gccagggtcc 180
 aggggaagggt ctggaatgga tcggagccat tgataattgt ccacantacg ccacctgggc 240
 gaaaggcaga ttatnatatt ccaaaacctn gaccacgggt gatttgaaaa tgaccagtcc 300
 gacaaccgag gacacggcca cctatttttg tggcagaatg aatactggta atagtggty 360
 gaagaatatt tggggccacg gcacctggt caccgtntcc taaggccaac ctac 414

<210> 503
 <211> 379
 <212> DNA

<213> Homo Sapiens

<220>

<221> misc_feature

<222> (1)...(379)

<223> n = A,T,C or G

<400> 503

atnagatggt	gctctggctaa	agggtgtccag	tgtccagtcgg	tggaggagtc	cgggggctgc	60
ctgggtcacgc	ctgggcacac	cctgcacac	acctgcacgc	tctctggatt	ngacacacgt	120
agctatggag	tgagctgggt	cggccaggct	ccagggaagg	ggctgggnata	catcggatca	180
ttagtattag	tggtacattt	tacgcgagct	gggcgaagg	cgaltcacc	atttccaaaa	240
cctgcacac	ggtggatttg	aaaatcacc	gtttgcacac	cgaggacacg	gccacctatt	300
tntgtgccag	aggggggttt	sattataaag	acatttgggg	cccaggcacc	ctggtccaccg	360
tntccttagg	gcaacctaa					379

<210> 504

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 504

Gly	Phe	Thr	Asn	Tyr	Thr	Asp	Phe	Glu	Asp	Ser	Pro	Tyr	Phe	Lys	Glu
1										10				15	
Asn	Ser	Ala													

<210> 505

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 505

Lys	Glu	Asn	Ser	Ala	Phe	Pro	Pro	Phe	Cys	Cys	Asn	Asp	Asn	Val	Thr
1				5						10				15	
Asn	Thr	Ala	Asn												
															20

<210> 506

<211> 407

<212> DNA

<213> Homo Sapiens

<400> 506

atgagagacag	gcctgcgctg	gcttctcctg	gtcgtcgcgc	tcaagggtgt	ccagtgtcag	60
tgcctggagg	agtcgcgggg	tgcgttggtc	acgcctggga	cacccctgac	actccacctg	120
acgctctctg	gattctccct	cagtagtaat	gcaatgatct	gggtccggcc	ggctccaggg	180
aaggggtcgg	aatacacatg	atacattagt	tatgggtgga	ggcctactta	cgcagatcgg	240
gtgaaggccc	gattccacat	ctccaaaacc	cgaacccagg	tggtatctgag	aatgaccagt	300
ctgacacacg	aggacacggc	caactatttc	tgtaccagaa	atagtgtatt	taagtgtatg	360
ttgtggggcc	caggacacct	ggtccacctg	tcttcagggc	aacctaa		407

<210> 507
 <211> 422
 <212> DNA
 <213> Homo Sapien

<400> 507
 alggagacag gctgagctg gcttctctg gtcgtgtg tcaagggtt cagtgtag 60
 tcggtagagg agtcggggg tcgcttggt acgctggga caccctgag actcactgt 120
 acagtctctg gattctctt cagcaactac gacttgaaat gggctcggca ggtccaggg 180
 aagggtctgg aatggatgg gatcattaat tatgttgga ggacggacta cgcgaactgg 240
 gcaaaaggcc ggttcacct ctccaaaac tcgaccacg tggatctca gatcgccagt 300
 ccgacaacgg aggaacagg cactatttc tgtgccagag ggtgggaagt cyatgagct 360
 ggtccgtgct tgcgcactg gggccaggc acctgggtca cgtctctt agggcaacct 420
 aa

<210> 508
 <211> 411
 <212> DNA
 <213> Homo Sapiens

<220>
 <221> misc_feature
 <222> (1)...(411)
 <223> n = A,T,C or G

<400> 508
 atggagacag gctcgtctg ctctctctg tcgctgtgct caaagggtc cagtgtcagt 60
 cggtagagga gtccgggggt cgcctggta cgcctgggac accctgaca ctcaactgca 120
 cagctctctg aatcgacct agtagctact gcatgagctg ggtccggcag gctccaggga 180
 aggggtctga atcgatcga atccttgga ctcttggtga cacatactac gtaggttggg 240
 cgaaggccgc attcaccat tccaaacct cgaacagggt gatntgaaa atcaccagtc 300
 cyaaaccca ggacacggc acctatttt gtgcagaga tcttcggga gtagtagta 360
 atggttatta taaaatctg ggcacaggca cctgtgtac cgtctcttg g 411

<210> 509
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 509
 Leu Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
 1 5 10 15

<210> 510
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 510
 Pro Glu Tyr Asn Arg Pro Leu Leu Ala Asn Asp Leu Met Leu Ile
 1 5 10 15

<210> 511
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 511

Tyr	His	Pro	Ser	Met	Phe	Cys	Ala	Gly	Gly	Gly	Gln	Asp	Gln	Lys
1				5				10					15	

<210> 512
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 512

Asp	Ser	Gly	Gly	Pro	Leu	Ile	Cys	Asn	Gly	Tyr	Leu	Gln	Gly	Leu
1				5				10					15	

<210> 513
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 513

Ala	Pro	Cys	Gly	Gln	Val	Gly	Val	Pro	Asx	Val	Tyr	Thr	Asn	Leu
1				5				10					15	

<210> 514
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 514

Leu	Cys	Lys	Phe	Thr	Glu	Trp	Ile	Gln	Lys	Thr	Val	Gln	Ala	Ser
1				5				10					15	

<210> 515
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 515
Met Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg
1 5 10 15

<210> 516
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 516
Val Ser Glu Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln
1 5 10 15

<210> 517
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 517
Glu Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met
1 5 10 15

<210> 518
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 518
Arg Ala Glu Pro Gly Thr Glu Ala Arg Arg His Tyr Asp Glu Gly
1 5 10 15

<210> 519
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 519
Arg Ala Glu Pro Gly Thr Glu Ala Arg Arg Asn Tyr Asp Glu Gly Cys
1 5 10 15
Gly

<210> 520
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
 <223> Made in a lab

 <400> 520
 Val Gly Glu Gly Leu Tyr Gln Gly Val Pro Arg Ala Glu Pro Gly Thr
 1 5 10 15
 Glu Ala Arg Arg His Tyr Asp Glu Gly
 20 25

 <210> 521
 <211> 21
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Made in a lab

 <400> 521
 Ala Pro Phe Pro Asn Gly His Val Gly Ala Gly Gly Ser Gly Leu Leu
 1 5 10 15
 Pro Pro Pro Pro Ala
 20

 <210> 522
 <211> 20
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Made in a lab

 <400> 522
 Leu Leu Val Val Pro Ala Ile Lys Lys Asp Tyr Gly Ser Gln Glu Asp
 1 5 10 15
 Phe Thr Gln Val
 20

 <210> 523
 <211> 354
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Made in a lab

 <220>
 <221> VARIANT
 <222> (1)...(254)
 <223> Xaa = any amino acid

 <400> 523
 Met Ala Thr Ala Gly Asn Pro Trp Gly Trp Phe Leu Gly Tyr Leu Ile
 1 5 10 15
 Leu Gly Val Ala Gly Ser Leu Val Ser Gly Ser Cys Ser Gln Ile Ile
 20 25 30
 Asn Gly Glu Asp Cys Ser Pro His Ser Gln Pro Trp Gln Ala Ala Leu
 35 40 45

Val Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln
50 55 60
Trp Val Leu Ser Ala Thr His Cys Phe Gln Asn Ser Tyr Thr Ile Gly
65 70 75 80
Leu Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met
85 90 95
Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu
100 105 110
Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu
115 120 125
Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala
130 135 140
Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg
145 150 155 160
Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu Glu
165 170 175
Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys
180 185 190
Ala Gly Gly Gly Gln Xaa Gln Xaa Asp Ser Cys Asn Gly Asp Ser Gly
195 200 205
Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly
210 215 220
Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn Leu
225 230 235 240
Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
245 250

<210> 524

<211> 765

<212> DNA

<213> Homo sapien

<400> 524

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tcgcagccct ggcaggcggc atgggtcatg gaaacgaat tgtctgtctc ggggtctctg 180
gtgcactcgc agtgggtgct gtccagctga cactgtttcc agaactctca caaccatggg 240
ctgggctctgc acagtcttga ggccgaccaa gagccaggga gccagatggt ggagggccagc 300
ctctccgtac ggaccccgaga gtacaaacaga cctctgtctg ctacgcacct catgtccatc 360
aagttggtag aatccgtgtc cgagtctgac accatccgga gcctcagcat tgcctcgacg 420
tgcctcaccg cgggggaactc ttgctctggt ttctggctggg gtctgtctgg gaacggcaga 480
atgcctaccg tgcctcagtg cgtgaacgtg ttgggtgtgt ctgaggaggt ctgcagtaag 540
ctctatgacc cgtgtgacaa ccccgacatg ttctgcgcgc gcggagggca agaccagaa 600
gactctgcca acggtgaact tggggggccc ctgatatgca acgggtactt gcagggcctt 660
gtgtctttcg gaaagccccc gtgtggccaa gtggcgctgc caggtgtcta caccacatc 720
tgcacattca ctgagtggtt agagaaacac gtccaggcca gttaa 765

<210> 525

<211> 254

<212> PRT

<213> Homo sapien

<400> 525

Met Ala Thr Ala Gly Asn Pro Trp Gly Trp Phe Leu Gly Tyr Leu Ile
1 5 10 15
Leu Gly Val Ala Gly Ser Leu Val Ser Gly Ser Cys Ser Gln Ile Ile
20 25 30
Asn Gly Glu Asp Cys Ser Pro His Ser Gln Pro Trp Gln Ala Ala Leu

35	40	45
Val Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln		
50	55	60
Trp Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly		
65	70	75
Leu Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met		
85	90	95
Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu		
100	105	110
Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu		
115	120	125
Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala		
130	135	140
Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg		
145	150	155
Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu Glu		
165	170	175
Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys		
180	185	190
Ala Gly Gly Gly Gln Asp Gln Lys Asp Ser Cys Asn Gly Asp Ser Gly		
195	200	205
Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly		
210	215	220
Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn Leu		
225	230	235
Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser		
245	250	

<210> 526

<211> 963

<212> DNA

<213> Homo sapiens

<400> 526

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aaagaccatt tctgggttgg ctcccccttc clttccatgt atgtagtggc astgtttgga 120
aaatgcatacg ttgtcttcat cgttaaggacg gaacgcagcd tgcacgctcc gatgtacctc 180
ttctcttgcg tgccttgacgc cattgacutg gcccttatcca catccaccat gcccaagatc 240
cttgcctctt ttgtgtttga ttcccgagag attagctttg agggctgtgt taccacagatg 300
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cgcttatgtg ccatctgcga cccactggcg catgtctgag tgcctaacaa tacagtaaca 420
gccacagattg gccatctggc tgtgtgtcgc ggcactctct ttttttccc actgcctctg 480
ctgatcaagg ggtctggctt ctgcacactcc aatgtctctt cgcactctta ttgtgtccac 540
caggtatgaa ctgaagtggc ctatgcagac actttgcaca atgtgtgata tgtcttact 600
gccattctcg tgggtatggg cgttggaagta atgttcatc ccttgcctta tttcttgata 660
atacyaacgg ttctgcaact gccctccaag ccagagcggg ccaaggcctt tggaaacctgt 720
gtgtcaacaa ttggtgtggt actcgcttcc tatgtgcaac ttattggcct ctacagttga 780
cacctgtttg gaacacagct tcatcccatc gtgcgtgttg tcatgggtga catctacctg 840
ctgtgtcttc ctgtcatcaa tccatcatc tatgtgtcaa aaaccaaaca gatcagaaca 900
cgggtgtcgg ctatgtcaca gatcagctgt gacacaggact tgcgggctgt gggaggcag 960
tga

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<210> 527

<211> 320

<212> PRT

<213> Homo sapiens

<400> 527

Met Ser Ser Cys Asn Phe Thr His Ala Thr Phe Val Leu Ile Gly Ile
5 10 15

Pro Gly Leu Glu Lys Ala His Phe Trp Val Gly Phe Pro Leu Leu Ser
20 25 30

Met Tyr Val Val Ala Met Phe Gly Asn Cys Ile Val Val Phe Ile Val
35 40 45

Arg Thr Gln Arg Ser Leu His Ala Pro Met Tyr Leu Phe Leu Cys Met
50 55 60

Leu Ala Ala Ile Asp Leu Ala Leu Ser Thr Ser Thr Met Pro Lys Ile
65 70 75 80

Leu Ala Leu Phe Trp Phe Asp Ser Arg Glu Ile Ser Phe Glu Ala Cys
85 90 95

Leu Thr Gln Met Phe Phe Ile His Ala Leu Ser Ala Ile Glu Ser Thr
100 105 110

Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys His Pro
115 120 125

Leu Arg His Ala Ala Val Leu Asn Asn Thr Val Thr Ala Gln Ile Gly
130 135 140

Ile Val Ala Val Val Arg Gly Ser Leu Phe Phe Phe Pro Leu Pro Leu
145 150 155 160

Leu Ile Lys Arg Leu Ala Phe Cys His Ser Asn Val Leu Ser His Ser
165 170 175

Tyr Cys Val His Gln Asp Val Met Lys Leu Ala Tyr Ala Asp Thr Leu
180 185 190

Pro Asn Val Val Tyr Gly Leu Thr Ala Ile Leu Leu Val Met Gly Val
195 200 205

Asp Val Met Phe Ile Ser Leu Ser Tyr Phe Leu Ile Ile Arg Thr Val
210 215 220

Leu Gln Leu Pro Ser Lys Ser Glu Arg Ala Lys Ala Phe Gly Thr Cys
225 230 235 240

Val Ser His Ile Gly Val Val Leu Ala Phe Tyr Val Pro Leu Ile Gly
245 250 255

Leu Ser Val Val His Arg Phe Gly Asn Ser Leu His Pro Ile Val Arg
260 265 270

Val Val Met Gly Asp Ile Tyr Leu Leu Leu Pro Pro Val Ile Asn Pro
275 280 285

Ile Ile Tyr Gly Ala Lys Thr Lys Gln Ile Arg Thr Arg Val Leu Ala
290 295 300

Met Phe Lys Ile Ser Cys Asp Lys Asp Leu Gln Ala Val Gly Gly Lys

305	310	315	320
<210> 528			
<211> 20			
<212> DNA			
<213> Homo Sapien			
<400> 528			
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<400> 529			
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Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr His Val His Gly Glu
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Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val Pro Arg
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Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Arg Asp
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Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser
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Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys Gln Leu Asn Val Leu
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Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile
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Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu Leu Gly Ile His Glu
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Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu
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Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys
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Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu Glu Gln Asn Val Asp
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<210> 537

<211> 1228

<212> PPT

<213> Homo sapiens

<450> 537

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Asn Leu Cys Ser Arg Val Phe Phe Trp Trp Leu Asn Pro Leu Phe Lys
          20                      25                      30

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Ile Gly His Lys Arg Arg Leu Glu Glu Asp Asp Met Tyr Ser Val Leu
          35                      40                      45

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Pro Asp Arg Ser Ser Gln His Leu Gly Glu Glu Leu Gln Gly Phe Trp
          50                      55                      60

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Asp Lys Glu Val Leu Arg Ala Glu Asn Asp Ala Gln Lys Pro Ser Leu

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65	70	75	80
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Ile Phe Thr Leu Ile Glu Glu Ser Ala Lys Val Ile Gln Pro Ile Phe	100	105	110
Leu Gly Lys Ile Ile Asn Tyr Phe Glu Asn Tyr Asp Pro Met Asp Ser	115	120	125
Val Ala Leu Asn Thr Ala Tyr Ala Tyr Ala Thr Val Leu Thr Phe Cys	130	135	140
Thr Leu Ile Leu Ala Ile Leu His His Leu Tyr Phe Tyr His Val Gln	145	150	155
Cys Ala Gly Met Arg Leu Arg Val Ala Met Cys His Met Ile Tyr Arg	165	170	175
Lys Ala Leu Arg Leu Ser Asn Met Ala Met Gly Lys Thr Thr Thr Gly	180	185	190
Gln Ile Val Asn Leu Leu Ser Asn Asp Val Asn Lys Phe Asp Gln Val	195	200	205
Thr Val Phe Leu His Phe Leu Trp Ala Gly Pro Leu Gln Ala Ile Ala	210	215	220
Val Thr Ala Leu Leu Trp Met Glu Ile Gly Ile Ser Cys Leu Ala Gly	225	230	235
Met Ala Val Leu Ile Ile Leu Leu Pro Leu Gln Ser Cys Phe Gly Lys	245	250	255
Leu Phe Ser Ser Leu Arg Ser Lys Thr Ala Thr Phe Thr Asp Ala Arg	260	265	270
Ile Arg Thr Met Asn Glu Val Ile Thr Gly Ile Arg Ile Ile Lys Met	275	280	285
Tyr Ala Trp Glu Lys Ser Phe Ser Asn Leu Ile Thr Asn Leu Arg Lys	290	295	300
Lys Glu Ile Ser Lys Ile Leu Arg Ser Ser Cys Leu Arg Gly Met Asn	305	310	315
Leu Ala Ser Phe Phe Ser Ala Ser Lys Ile Ile Val Phe Val Thr Phe	325	330	335
Thr Thr Tyr Val Leu Leu Gly Ser Val Ile Thr Ala Ser Arg Val Phe	340	345	350
Val Ala Val Thr Leu Tyr Gly Ala Val Arg Leu Thr Val Thr Leu Phe	355	360	365
Phe Pro Ser Ala Ile Glu Arg Val Ser Glu Ala Ile Val Ser Ile Arg	370	375	380

Arg Ile Gln Thr Phe Leu Leu Leu Asp Glu Ile Ser Gln Arg Asn Arg
 385 390 395 400
 Gln Leu Pro Ser Asp Gly Lys Lys Met Val His Val Gln Asp Phe Thr
 405 410 415
 Ala Phe Trp Asp Lys Ala Ser Glu Thr Pro Thr Leu Gln Gly Leu Ser
 420 425 430
 Phe Thr Val Arg Pro Gly Glu Leu Leu Ala Val Val Gly Pro Val Gly
 435 440 445
 Ala Gly Lys Ser Ser Leu Leu Ser Ala Val Leu Gly Glu Leu Ala Pro
 450 455 460
 Ser His Gly Leu Val Ser Val His Gly Arg Ile Ala Tyr Val Ser Gln
 465 470 475 480
 Gln Pro Trp Val Phe Ser Gly Thr Leu Arg Ser Asn Ile Leu Phe Gly
 485 490 495
 Lys Lys Tyr Glu Lys Glu Arg Tyr Glu Lys Val Ile Lys Ala Cys Ala
 500 505 510
 Leu Lys Lys Asp Leu Gln Leu Leu Gln Asp Gly Asp Leu Thr Val Ile
 515 520 525
 Gly Asp Arg Gly Thr Thr Leu Ser Gly Gly Gln Lys Ala Arg Val Asn
 530 535 540
 Leu Ala Arg Ala Val Tyr Gln Asp Ala Asp Ile Tyr Leu Leu Asp Asp
 545 550 555 560
 Pro Leu Ser Ala Val Asp Ala Glu Val Ser Arg His Leu Phe Glu Leu
 565 570 575
 Cys Ile Cys Gln Ile Leu His Glu Lys Ile Thr Ile Leu Val Thr His
 580 585 590
 Gln Leu Gln Tyr Leu Lys Ala Ala Ser Gln Ile Leu Ile Leu Lys Asp
 595 600 605
 Gly Lys Met Val Gln Lys Gly Thr Tyr Thr Glu Phe Leu Lys Ser Gly
 610 615 620
 Ile Asp Phe Gly Ser Leu Leu Lys Lys Asp Asn Glu Glu Ser Glu Gln
 625 630 635 640
 Pro Pro Val Pro Gly Thr Pro Thr Leu Arg Asn Arg Thr Phe Ser Glu
 645 650 655
 Ser Ser Val Trp Ser Gln Gln Ser Ser Arg Pro Ser Leu Lys Asp Gly
 660 665 670
 Ala Leu Glu Ser Gln Asp Thr Glu Asn Val Pro Val Thr Leu Ser Glu
 675 680 685

Glu Asn Arg Ser Glu Gly Lys Val Gly Phe Gln Ala Tyr Lys Asn Tyr
 690 695 700
 Phe Arg Ala Gly Ala His Trp Ile Val Phe Ile Phe Leu Ile Leu Leu
 705 710 715 720
 Asn Thr Ala Ala Gln Val Ala Tyr Val Leu Gln Asp Trp Trp Leu Ser
 725 730 735
 Tyr Trp Ala Asn Lys Gln Ser Met Leu Asn Val Thr Val Asn Gly Gly
 740 745 750
 Gly Asn Val Thr Glu Lys Leu Asp Leu Asn Trp Tyr Leu Gly Ile Tyr
 755 760 765
 Ser Gly Leu Thr Val Ala Thr Val Leu Phe Gly Ile Ala Arg Ser Leu
 770 775 780
 Leu Val Phe Tyr Val Leu Val Asn Ser Ser Gln Thr Leu His Asn Lys
 785 790 795 800
 Met Phe Glu Ser Ile Leu Lys Ala Pro Val Leu Phe Phe Asp Arg Asn
 805 810 815
 Pro Ile Gly Arg Ile Leu Asn Arg Phe Ser Lys Asp Ile Gly His Leu
 820 825 830
 Asp Asp Leu Leu Pro Leu Thr Phe Leu Asp Phe Ile Gln Thr Leu Leu
 835 840 845
 Gln Val Val Gly Val Val Ser Val Ala Val Ala Val Ile Pro Trp Ile
 850 855 860
 Ala Ile Pro Leu Val Pro Leu Gly Ile Ile Phe Ile Phe Leu Arg Arg
 865 870 875 880
 Tyr Phe Leu Glu Thr Ser Arg Asp Val Lys Arg Leu Glu Ser Thr Thr
 885 890 895
 Arg Ser Pro Val Phe Ser His Leu Ser Ser Ser Leu Gln Gly Leu Trp
 900 905 910
 Thr Ile Arg Ala Tyr Lys Ala Glu Gln Arg Cys Gln Glu Leu Phe Asp
 915 920 925
 Ala His Gln Asp Leu His Ser Glu Ala Trp Phe Leu Phe Leu Thr Thr
 930 935 940
 Ser Arg Trp Phe Ala Val Arg Leu Asp Ala Ile Cys Ala Met Phe Val
 945 950 955 960
 Ile Ile Val Ala Phe Gly Ser Leu Ile Leu Ala Lys Thr Leu Asp Ala
 965 970 975
 Gly Gln Val Gly Leu Ala Leu Ser Tyr Ala Leu Thr Leu Met Gly Met
 980 985 990
 Phe Gln Trp Cys Val Arg Gln Ser Ala Glu Val Glu Asn Met Met Ile

995 1000 1005

Ser Val Glu Arg Val Ile Glu Tyr Thr Asp Leu Glu Lys Glu Ala Pro
1010 1015 1020

Trp Glu Tyr Gln Lys Arg Pro Pro Pro Ala Trp Pro His Glu Gly Val
1025 1030 1035 1040

Ile Ile Phe Asp Asn Val Asn Phe Met Tyr Ser Pro Gly Gly Pro Leu
1045 1050 1055

Val Leu Lys His Leu Thr Ala Leu Ile Lys Ser Gln Glu Lys Val Gly
1060 1065 1070

Ile Val Gly Arg Thr Gly Ala Gly Lys Ser Ser Leu Ile Ser Ala Leu
1075 1080 1085

Phe Arg Leu Ser Glu Pro Glu Gly Lys Ile Trp Ile Asp Lys Ile Leu
1090 1095 1100

Thr Thr Glu Ile Gly Leu His Asp Leu Arg Lys Lys Met Ser Ile Ile
1105 1110 1115 1120

Pro Gln Glu Pro Val Leu Phe Thr Gly Thr Met Arg Lys Asn Leu Asp
1125 1130 1135

Pro Phe Asn Glu His Thr Asp Glu Glu Leu Trp Asn Ala Leu Gln Glu
1140 1145 1150

Val Gln Leu Lys Glu Thr Ile Glu Asp Leu Pro Gly Lys Met Asp Thr
1155 1160 1165

Glu Leu Ala Glu Ser Gly Ser Asn Phe Ser Val Gly Gln Arg Gln Leu
1170 1175 1180

Val Cys Leu Ala Arg Ala Ile Leu Arg Lys Asn Gln Ile Leu Ile Ile
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Asp Glu Ala Thr Ala Asn Val Asp Pro Arg Thr Asp Glu Leu Ile Gln
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Lys Lys Ser Gly Arg Asn Leu Pro Thr Ala Pro Cys
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<211> 1261
<212> PRT
<213> Homo sapiens

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Gln Lys Pro Ser Leu Thr Arg Ala Ile Ile Lys Cys Tyr Trp Lys Ser
35 40 45

Tyr Leu Val Leu Gly Ile Phe Thr Leu Ile Glu Glu Ser Ala Lys Val
 50 55 60
 Ile Gln Pro Ile Phe Leu Gly Lys Ile Ile Asn Tyr Phe Glu Asn Tyr
 65 70 75 80
 Asp Pro Met Asp Ser Val Ala Leu Asn Thr Ala Tyr Ala Tyr Ala Thr
 85 90 95
 Val Leu Thr Phe Cys Thr Leu Ile Leu Ala Ile Leu His His Leu Tyr
 100 105 110
 Phe Tyr His Val Gln Cys Ala Gly Met Arg Leu Arg Val Ala Met Cys
 115 120 125
 His Met Ile Tyr Arg Lys Ala Leu Arg Leu Ser Asn Met Ala Met Gly
 130 135 140
 Lys Thr Thr Thr Gly Gln Ile Val Asn Leu Leu Ser Asn Asp Val Asn
 145 150 155 160
 Lys Phe Asp Gln Val Thr Val Phe Leu His Phe Leu Trp Ala Gly Pro
 165 170 175
 Leu Glu Ala Ile Ala Val Thr Ala Leu Leu Trp Met Glu Ile Gly Ile
 180 185 190
 Ser Cys Leu Ala Gly Met Ala Val Leu Ile Ile Leu Leu Pro Leu Gln
 195 200 205
 Ser Cys Phe Gly Lys Leu Phe Ser Ser Leu Arg Ser Lys Thr Ala Thr
 210 215 220
 Phe Thr Asp Ala Arg Ile Arg Thr Met Asn Glu Val Ile Thr Gly Ile
 225 230 235 240
 Arg Ile Ile Lys Met Tyr Ala Trp Glu Lys Ser Phe Ser Asn Leu Ile
 245 250 255
 Thr Asn Leu Arg Lys Lys Glu Ile Ser Lys Ile Leu Arg Ser Ser Cys
 260 265 270
 Leu Arg Gly Met Asn Leu Ala Ser Phe Phe Ser Ala Ser Lys Ile Ile
 275 280 285
 Val Phe Val Thr Phe Thr Thr Tyr Val Leu Leu Gly Ser Val Ile Thr
 290 295 300
 Ala Ser Arg Val Phe Val Ala Val Thr Leu Tyr Gly Ala Val Arg Leu
 305 310 315 320
 Thr Val Thr Leu Phe Phe Pro Ser Ala Ile Glu Arg Val Ser Glu Ala
 325 330 335
 Ile Val Ser Ile Arg Arg Ile Gln Thr Phe Leu Leu Leu Asp Glu Ile
 340 345 350

Ser Gln Arg Asn Arg Gln Leu Pro Ser Asp Gly Lys Lys Met Val His
 355 360 365
 Val Gln Asp Phe Thr Ala Phe Trp Asp Lys Ala Ser Glu Thr Pro Thr
 370 375 380
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 385 390 395 400
 Val Gly Pro Val Gly Ala Gly Lys Ser Ser Leu Leu Ser Ala Val Leu
 405 410 415
 Gly Glu Leu Ala Pro Ser His Gly Leu Val Ser Val His Gly Arg Ile
 420 425 430
 Ala Tyr Val Ser Gln Gln Pro Trp Val Phe Ser Gly Thr Leu Arg Ser
 435 440 445
 Asn Ile Leu Phe Gly Lys Lys Tyr Glu Lys Glu Arg Tyr Glu Lys Val
 450 455 460
 Ile Lys Ala Cys Ala Leu Lys Lys Asp Leu Gln Leu Leu Glu Asp Gly
 465 470 475 480
 Asp Leu Thr Val Ile Gly Asp Arg Gly Thr Thr Leu Ser Gly Gly Gln
 485 490 495
 Lys Ala Arg Val Asn Leu Ala Arg Ala Val Tyr Gln Asp Ala Asp Ile
 500 505 510
 Tyr Leu Leu Asp Asp Pro Leu Ser Ala Val Asp Ala Glu Val Ser Arg
 515 520 525
 His Leu Phe Glu Leu Cys Ile Cys Gln Ile Leu His Glu Lys Ile Thr
 530 535 540
 Ile Leu Val Thr His Gln Leu Gln Tyr Leu Lys Ala Ala Ser Gln Ile
 545 550 555 560
 Leu Ile Leu Lys Asp Gly Lys Met Val Gln Lys Gly Thr Tyr Thr Glu
 565 570 575
 Phe Leu Lys Ser Gly Ile Asp Phe Gly Ser Leu Leu Lys Lys Asp Asn
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 Glu Glu Ser Glu Gln Pro Pro Val Pro Gly Thr Pro Thr Leu Arg Asn
 595 600 605
 Arg Thr Phe Ser Glu Ser Ser Val Trp Ser Gln Gln Ser Ser Arg Pro
 610 615 620
 Ser Leu Lys Asp Gly Ala Leu Glu Ser Gln Asp Thr Glu Asn Val Pro
 625 630 635 640
 Val Thr Leu Ser Glu Glu Asn Arg Ser Glu Gly Lys Val Gly Phe Gln
 645 650 655
 Ala Tyr Lys Asn Tyr Phe Arg Ala Gly Ala His Trp Ile Val Phe Ile

660	665	670
Phe Leu Ile Leu Leu Asn Thr Ala Ala Gln Val Ala Tyr Val Leu Gln 675	680	685
Asp Trp Trp Leu Ser Tyr Trp Ala Asn Lys Gln Ser Met Leu Asn Val 690	695	700
Thr Val Asn Gly Gly Gly Asn Val Thr Glu Lys Leu Asp Leu Asn Trp 705	710	715
Tyr Leu Gly Ile Tyr Ser Gly Leu Thr Val Ala Thr Val Leu Phe Gly 725	730	735
Ile Ala Arg Ser Leu Leu Val Phe Tyr Val Leu Val Asn Ser Ser Gln 740	745	750
Thr Leu His Asn Lys Met Phe Glu Ser Ile Leu Lys Ala Pro Val Leu 755	760	765
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Ile Phe Leu Arg Arg Tyr Phe Leu Glu Thr Ser Arg Val Lys Arg 835	840	845
Leu Glu Ser Thr Thr Arg Ser Pro Val Phe Ser His Leu Ser Ser Ser 850	855	860
Leu Gln Gly Leu Trp Thr Ile Arg Ala Tyr Lys Ala Glu Glu Arg Cys 865	870	875
Gln Glu Leu Phe Asp Ala His Gln Asp Leu His Ser Glu Ala Trp Phe 885	890	895
Leu Phe Leu Thr Thr Ser Arg Trp Phe Ala Val Arg Leu Asp Ala Ile 900	905	910
Cys Ala Met Phe Val Ile Ile Val Ala Phe Gly Ser Leu Ile Leu Ala 915	920	925
Lys Thr Leu Asp Ala Gly Gln Val Gly Leu Ala Leu Ser Tyr Ala Leu 930	935	940
Thr Leu Met Gly Met Phe Gln Trp Cys Val Arg Gln Ser Ala Glu Val 945	950	955
Glu Asn Met Met Ile Ser Val Glu Arg Val Ile Glu Tyr Thr Asp Leu 965	970	975

Glu Lys Glu Ala Pro Trp Glu Tyr Gln Lys Arg Pro Pro Pro Ala Trp
 980 985 990
 Pro His Glu Gly Val Ile Ile Phe Asp Asn Val Asn Phe Met Tyr Ser
 995 1000 1005
 Pro Gly Gly Pro Leu Val Leu Lys His Leu Thr Ala Leu Ile Lys Ser
 1010 1015 1020
 Gln Glu Lys Val Gly Ile Val Gly Arg Thr Gly Ala Gly Lys Ser Ser
 1025 1030 1035 1040
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 1045 1050 1055
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 Lys Met Ser Ile Ile Pro Gln Glu Pro Val Leu Phe Thr Gly Thr Met
 1075 1080 1085
 Arg Lys Asn Leu Asp Pro Phe Asn Glu His Thr Asp Glu Glu Leu Trp
 1090 1095 1100
 Asn Ala Leu Gln Glu Val Gln Leu Lys Glu Thr Ile Glu Asp Leu Pro
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 Gly Lys Met Asp Thr Glu Leu Ala Glu Ser Gly Ser Asn Phe Ser Val
 1125 1130 1135
 Gly Gln Arg Gln Leu Val Cys Leu Ala Arg Ala Ile Leu Arg Lys Asn
 1140 1145 1150
 Gln Ile Leu Ile Ile Asp Glu Ala Thr Ala Asn Val Asp Pro Arg Thr
 1155 1160 1165
 Asp Glu Leu Ile Gln Lys Lys Ile Arg Glu Lys Phe Ala His Cys Thr
 1170 1175 1180
 Val Leu Thr Ile Ala His Arg Leu Asn Thr Ile Ile Asp Ser Asp Lys
 1185 1190 1195 1200
 Ile Met Val Leu Asp Ser Gly Arg Leu Lys Glu Tyr Asp Glu Pro Tyr
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 Trp Gly Phe Thr Met Leu Ala Arg Leu Val Ser Asn Ser
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<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 539

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<210> 540

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in a lab

<400> 540

Ala Val Val Thr Ala Ser Ala Ala Leu
1 5

<210> 541

<211> 14

<212> PRT

<213> Homo sapiens

<400> 541

Leu Ala Gly Leu Leu Cys Pro Asp Pro Arg Pro Leu Glu Leu
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<210> 542

<211> 15

<212> PRT

<213> Homo sapiens

<400> 542

Thr Gln Val Val Phe Asp Lys Ser Asp Leu Ala Lys Tyr Ser Ala
5 10 15

<210> 543

<211> 12

<212> PRT

<213> Homo sapiens

<400> 543

Phe Met Gly Ser Ile Val Gln Leu Ser Gln Ser Val
5 10

<210> 544

<211> 18

<212> PRT

<213> Homo sapiens

<400> 544

Thr Tyr Val Pro Pro Leu Leu Leu Glu Val Gly Val Glu Glu Lys Phe

5 10 15

Net Tax

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<210> 545
<211> 18
<212> PRT
<213> Homo sapiens
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Met Asp Arg Leu Val Gln Arg Phe Gly Thr Arg Ala Val Tyr Leu Ala
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See Vol

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<210> 546
<211> 29
<212> PRT
<213> Homo sapiens
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(400) 546
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5 10 15

Thr Glu Ala Arg Arg His Tyr Asp Glu Gly Val Arg Met
20 25

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<210> 547
<211> 56
<212> PRT
<213> Homo sapiens
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Val Ala Glu Glu Ala Ala Leu Gly Pro Thr Glu Pro Ala Glu Gly Leu
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Ser Ala Pro Ser Leu Ser Pro His Cys Cys Pro Cys Arg Ala Arg Leu
20 25 30

Ala Phe Arg Asn Leu Gly Ala Leu Leu Pro Arg Leu His Gln Leu Cys
35 40 45

Cys Arg Met Pro Arg Thr Leu Arg Arg Leu
50 55

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<210> 548
<211> 18
<212> PRT
<213> Homo sapiens
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<400> 548
Ile Asp Trp Asp Thr Ser Ala Leu Ala Pro Tyr Leu Gly Thr Gln Glu

200

	5	10	15
Glu Cys			
<210> 549			
<211> 16			
<212> PRT			
<213> Homo sapiens			
<400> 549			
Leu Glu Ala Leu Leu Ser Asp Leu Phe Arg Asp Pro Asp His Cys Arg			
	5	10	15
Gln Ala			

```

<210> 550
<211> 14
<212> PRT
<213> Homo sapiens

<400> 550
Ser Asp His Trp Arg Gly Arg Tyr Gly Arg Arg Arg Pro She
          5                                10

<210> 551
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> Made in a lab

<400> 551
The Asp Lys Ser Asp Leu Ala Lys Tyr Ser Ala
1          5                                10

```